

USDA Cibola National Forest Mountain Districts Plan Revision

Inventory and Evaluation of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System

DRAFT Process Paper July 18, 2016



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Introduction

The Cibola National Forest is in the required¹ process of revising the forest plan for the four mountain ranger districts (RDs): Mount Taylor, Magdalena, Mountainair, and Sandia. Part of the revision process includes identifying and evaluating lands that may be suitable for inclusion in the National Wilderness Preservation System (NWPS) and determining whether to recommend to the Chief of the Forest Service any such lands for wilderness designation. A description of this process can be found in the 2012 Forest Service Planning Rule and Chapter 70 of the Forest Service Land Management Planning Handbook 1909.12. This process includes the following four steps:

1. Identify and inventory all lands that may be suitable for inclusion in the National Wilderness Preservation System
2. Evaluate the wilderness characteristics of each area based on a given set of criteria
3. The forest supervisor will determine which areas to further analyze in the National Environmental Policy Act (NEPA) process
4. The forest supervisor will decide which areas, if any, to recommend for inclusion in the National Wilderness Preservation System (NWPS).

Lands evaluated and analyzed through this process and the resulting NEPA analysis are only preliminary administrative recommendations; Congress has reserved the authority to make final decisions on wilderness designation.

This report summarizes the process to date that the Cibola National Forest has completed.

Inventory of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System

The Cibola National Forest interdisciplinary team (IDT) began identifying and inventorying lands that may be suitable for inclusion in the NWPS using the size, adjacency, and road improvements criteria outlined in the Forest Service Handbook.² The directives used to the complete Phase 1 Inventory were the draft directives, dated December 19, 2013.

During the Cibola National Forest's initial inventory, a set of criteria was used, which is described below.

Phase 1 Inventory

Phase 1 Inventory Process and Criteria

1. The team applied initial screening, which included the following:

- Private and state inholdings were not included in the inventory.
- Military withdrawal lands (on the Sandia Ranger District) and the Langmuir Research Site (Magdalena Ranger District) were not included in the inventory.³
- The 1985 Cibola National Forest Plan Utility Corridors were excluded from the inventory areas, as well as other known cleared rights of way and pipelines.

¹ National Forest Management Act of 1976

² See FSH 1909.12 Chapter 70, 71.21 and 71.22a

³ Langmuir Research Site was not included in Phase 1 inventory, but was added after public comments for the Phase 2 Inventory.

- Level 2 through Level 5 roads⁴ shown on the inventory map were buffered by 30 meters (98.4 feet) on either side of the road centerline, and these areas were removed from the inventory.
- 2. **The areas resulting from the initial screening listed above were then further subdivided, based on the intrusion of roads into areas, to leave as few areas with internal road spurs as practical.**
- 3. **Acreages of final areas were then updated, and coded as follows:**
 - **Criterion #1: An area greater than 5,000 acres.**
 - **Criterion #2: An area adjacent to existing Wilderness regardless of size.** Existing wilderness includes not only existing Congressionally designated wilderness areas, but also administratively recommended wilderness areas and wilderness inventories on other federal lands (such as wilderness study areas on Bureau of Land Management Land).
 - **Criterion #3: A stand-alone area (not adjacent to existing Wilderness) that is less than 5,000 acres but of sufficient size to make practicable its preservation and use in an unimpaired condition and can be effectively managed as a separate unit of NWPS.**

The Cibola National Forest included on the draft inventory maps those areas involved in projects such as Magdalena RD Travel Management; Military Training Exercises Area; Zuni Mountain Trail Partnership (Mount Taylor RD); or other projects that are undergoing or soon to be undergoing a NEPA analysis. Lands involved in these projects may be removed from further consideration during the evaluation phase, depending on a decision regarding these projects. Maps will be updated as project decisions are signed.

The Cibola National Forest hosted a series of collaborative workshops in September 2014 (see Appendix G). These workshops focused on the initial identification and inventory of lands that may be suitable for inclusion in the NWPS.

Phase 1 Inventory Public Collaboration

The public provided comments on the Phase 1 inventory results through an online collaborative mapping tool, hard copy comment forms, e-mail, and postal mail from September 9, 2014 through November 21, 2014. The Cibola National Forest received a total of 1,107 comments during the comment period.

The following is a summary of the number of comments received by format:

- 37 comment letters or forms were received by postal mail.
- 265 comments were submitted into the Collaborative Mapping Tool by users.
- 805 comment letters were received by e-mail; 731 of the letters were form letters from members of one of several non-governmental organizations.

There were 50 comments addressing specific Phase 1 inventory areas entered into the Collaborative Mapping Tool geodatabase by Cibola National Forest staff on behalf of individuals who had emailed or postal mailed letter. These are included in the total number of comments received.

Phase 1 Inventory Results

The resulting areas and acres, after applying the criteria for Phase 1 Inventory, are summarized by District in Table 1. Some overall results include the following:

⁴ Level 2 through Level 5 roads refers to the range of Forest Service road classifications. Level 2 roads can be accessed using high clearance/4-WD (Level 2) and Level 5 roads are typically paved and can be accessed using standard passenger vehicles.

No stand-alone areas less than 5,000 acres were included because they were not of a sufficient size as to make practical its preservation and use in an unimpaired condition (from Criterion #3). Some areas less than 5,000 acres in size were included because they are adjacent to an existing wilderness or recommended wilderness study area⁵ (from Criterion #2).

Table 1. Phase 1 inventory results presented in the September 2014 public workshops.

District	Number Areas	Acres (approximate)
34 Stand-alone Areas Greater than 5,000 Acres		
Mount Taylor	12	113,429
Magdalena	20	253,190
Mountainair	2	15,176
Sandia	0	0
Total	34	381,795
26 Areas Adjacent to Existing Wilderness or Recommended Wilderness Study Areas		
Mount Taylor	0	0
Magdalena	8	96,074
Mountainair	8	19,852
Sandia	10	4,740
Total	26	120,666
Phase 1 Inventory TOTAL	60 areas	502,461 acres

Phase 2 Inventory

Phase 2 Inventory Process and Criteria

In Phase 2, the Cibola National Forest interdisciplinary team (IDT) (see Appendix F) further revised the inventory areas using the following:

- For each ranger district, public comments submitted during Phase 1 were used to refine the areas.**
- Criteria #1, #2, and #3 from Phase 1 were used.**
- Additional Criterion #4: Substantially noticeable improvements.** In addition to the Phase 1 criteria, the team developed a definition for ‘substantially noticeable’ from the Forest Service Handbook—the “other improvements” criterion⁶. This criterion requires the inclusion of those areas in the inventory where improvements are not substantially noticeable.

Please see Appendix A for a detailed description of how the definition of ‘substantially noticeable’ was developed, and how that criterion was applied to areas in Phase 2.

Each area was also reviewed with public comments on the inventory using Appendix A. Comments pertaining to the evaluation phase were retained and carried forward for consideration in the next phase of the process. These comments are available in a detailed spreadsheet by area upon request. Refer to Appendix B for the detailed inventory results.

⁵ Wilderness study areas are management areas on Bureau of Land Management federal lands.

⁶ Other improvements refers to improvements other than roads, and includes airstrips and heliports, vegetation treatments, timber harvest areas, permanently installed vertical structures, areas of mining activity, range improvement areas, recreation improvements, ground-return telephone, electric, and power lines, watershed treatment areas, lands adjacent to development or activities that impact opportunities for solitude, structures, dwellings, and other relics of past occupation, and areas with improvements that have been proposed by Forest Service for consideration as recommend wilderness through previous planning efforts. See FSH 1909.12 Chapter 70, 71.22b, pgs. 9-10.

Phase 2 Inventory Results

In April 2015, findings from the district IDT meetings were summarized and presented to the Cibola National Forest Plan Revision Steering Committee for consideration.

Results are documented in a summary, with findings and conclusions from the IDT team meetings (Appendix B). The Steering Committee reviewed results for each inventory area and made the following decisions:

- **Area stayed on the inventory with no modifications;**
- **Area was modified after considering substantially noticeable improvements;**
- **Area was excluded from the inventory.** In order to be excluded from the Phase 2 inventory, the area no longer met Criterion #1: an area greater than 5,000 acres (for stand-alone areas) after substantially noticeable improvements were excluded.
- **The Steering Committee also reviewed findings on requested additions made by the public, and decided on adding requested areas to existing inventory areas or adding entirely new areas to the inventory.**

Steering Committee conclusions on Phase 2 inventory areas are summarized below. A more detailed summary is also available in Appendix B.

The resulting areas and acres, after applying the criteria for Phase 2 Inventory, are summarized in Table 2. This table also shows a comparison of results between Phase 1 and Phase 2. Some overall results include the following:

- **13 stand-alone areas, greater than 5,000 acres, were removed from the inventory.** Once substantially noticeable improvements were excluded from these areas, they no longer met Criterion #1 (the size criteria outlined in Chapter 70 directives) and the Steering Committee did not feel they met Criterion #3 (were of sufficient size as to make practicable their preservation and use in an unimpaired condition).
 - Mount Taylor Ranger District: (5) of these areas were removed.
 - Magdalena Ranger District: (7) of these areas were removed.
 - Mountainair Ranger District: (1) area was removed.
- **4 additional areas identified by the public were considered, including additions which met Criterion #2, by being adjacent to existing wilderness, primitive area, administratively recommended wilderness or wilderness inventory of other Federal ownership. Three of these areas were added to the inventory.**
 - Mount Taylor Ranger District: (1) area (D2_ADJ1) was requested for addition by the public, but found to not be adjacent to Bureau of Land Management wilderness study areas, as can be seen on Phase 2 inventory maps.
 - Magdalena Ranger District: (3) areas adjacent to Bureau of Land Management wilderness study areas were added (D3_ADJ9, D3_ADJ10, and D3_LANG), as requested by public comment. Please see Phase 2 inventory maps.
- **Forest-wide, 382,488 acres remain for consideration in Phase 2, or 76% of the Phase 1 total acreage.**
- **Other areas stayed on the inventory with either no modifications from Phase 1 or with some modifications.** Modifications include, but are not limited to, consideration of areas with substantially noticeable improvements or including additions identified by the public. Areas which stayed on the inventory either meet Criterion #1 (size criteria) or Criterion #2 (are

adjacent to existing wilderness, primitive area, administratively recommended wilderness or wilderness inventory of other Federal ownership).

Table 2. Comparison of Phase 1 and Phase 2 Inventory Results.

District	PHASE 1: Number of Areas	PHASE 1: Acres*	PHASE 2: Number of Areas	PHASE 2: Acres*	Percent of Acres Remaining from Phase 1 to Phase 2
Mount Taylor	12	113,429	7	63,886	56%
Magdalena	28	349,263	38**	291,458	83%
Mountainair	10	35,028	9	22,621	65%
Sandia	10	4,740	11	4,523	95%
TOTAL	60	502,460	65	382,488	76%

*All acres are approximate.

** During Phase 2, one large area (D3_ADJ8) adjacent to the Apache Kid Wilderness Area was split into multiple areas, which accounts for the increase in the number of areas from Phase 1 to Phase 2.

Phase 2 Inventory Public Collaboration

The Cibola National Forest began working with cooperators for each of the four mountain districts, known as landscape teams, co-hosted a series of collaborative meetings in June of 2015, along with a comment period from July 20 to September 25, 2015. For a more detailed explanation of the landscape team process, please visit the Cibola National Forest Plan Revision website.⁷

The Cibola National Forest asked the public to comment on the following:

1. The **draft substantially noticeable definition for the inventory criteria**,
2. The **draft Phase 2 inventory maps**, and
3. The **draft evaluation criteria** to be used in the next phase, evaluation.
4. Additionally, the public was asked to review the **draft Phase 2 inventory maps and evaluate the Phase 2 inventoried areas for wilderness character, using the draft evaluation criteria**.

At any point in the process, the public was welcome to submit comments on whether any areas not on the Phase 2 maps should move forward into evaluation.

The public provided comments using the draft Phase 2 inventory results through an online collaborative mapping tool, hard copy comment forms, e-mail, and postal mail. Comments on the criteria were received via hard copy comment forms, e-mail, and postal mail.

The Cibola National Forest received a total of 675 comments during the comment period of July 20 to September 25, 2015, and a summary is as follows:

- 329 comments were coded out of 137 letters in the Content Analysis Response Application (CARA) online commenting system. These comments were entered into CARA by Forest Service personnel on the public's behalf or exported directly into the system, and contain comments received through email, postal mail, comment forms, etc.
- **183 of these CARA comments** were coded as wilderness-related.
- **387 comments** were entered by the public into the **online collaborative mapping tool system**, and all were wilderness-related.

⁷ http://www.fs.usda.gov/detail/cibola/landmanagement/planning/?cid=fsbdev3_065627

In addition to the comments received July 20 through September 25, 2015, Cibola National Forest considered **all** comments related to wilderness from the Notice of Intent comment period in 2014 through the end of the Phase 2 comment period on September 25, 2015. From 2014 to 2015, **532 wilderness-related comments** were received and entered into **CARA** and **697 wilderness-related comments** were received through the **online collaborative mapping tool**. In summary, the **Cibola National Forest received 1,229 comments related to wilderness**.

Phase 3 Inventory

Phase 3 Inventory Process

Once the public comment period ended, the Cibola National Forest worked with the landscape teams to organize and code the comments received by subject matter and topic. Once public comments were processed, a decision on the final substantially noticeable definitions for the inventory criteria was made by the Steering Committee after reviewing public comment on the criteria. The Cibola National Forest core planning team and extended interdisciplinary teams then held a series of meetings to address comments on the draft Phase 2 Inventory maps and make recommendations to the Steering Committee for decisions on draft Phase 3 Inventory maps. These meetings were held at the four respective mountain districts during October of 2015. The core and extended interdisciplinary team (IDT) present at each of those district meetings consisted of Forest Service personnel as well as the members of the cooperating agencies participating in each District's landscape team. This extended IDT reviewed all Phase 2 inventory areas, considering public comments and interdisciplinary knowledge, including field knowledge of the extended IDT, to recommend any changes, deletions, or additions to inventoried areas to the Steering Committee.

Once these efforts were complete, recommendations of the extended IDT teams were presented to the Steering Committee for a decision on draft Phase 3 Inventory maps. The draft Phase 3 Inventory maps were developed in November 2015; Table 3 summarizes the acreage results.

The draft Phase 3 inventory maps were used in the next phase of the process, evaluation. These draft Phase 3 inventory maps will be available to the public for comment and sharing July 18, 2016.

Magdalena District Travel Management Decision

The final Travel Management decision for the Magdalena District was signed on September 30, 2015; accordingly, all of the inventoried areas on the Phase 2 maps for Magdalena District were updated to reflect the decision for NFS roads designated for motor vehicle use, and the inventory roads criteria was applied. For this reason, acreages differ from Phase 2 to Phase 3 Inventory for Magdalena; these differences are identified in Appendix B: Detailed Inventory Results. Motorized dispersed camping corridors in Magdalena included a 300' buffer on either side of the road; these dispersed camping corridors were removed from the inventoried areas and from further consideration. The rationale for removal of motorized dispersed camping corridors from the inventoried areas is that legal use for a dispersed motorized camping corridor equates to legal motorized use, and these corridors are essentially extensions of the road.

Public Comment on Substantially Noticeable Improvements

During the Phase 2 comment period, the Cibola National Forest received comments that some areas in Magdalena District were removed in Phase 2 that did not have substantially noticeable features, and these areas should be re-included in the inventory. These areas were reviewed and some were

determined to not contain any substantially noticeable features; therefore, some areas were added back into the inventory between Phase 2 and Phase 3.

Some of the areas added back in were under 5,000 acres and not adjacent to existing wilderness. The 2012 Planning Directives inventory criteria considers an area of 5,000 acres of sufficient size to make practicable its preservation and use in an unimpaired condition, and areas under 5,000 acres that are not adjacent to an existing wilderness are generally not included on the inventory maps. The inventory criteria, however, identifies that an area may be included on inventory maps if is less than 5,000 acres but is of sufficient size to make its preservation and use in an unimpaired condition practicable. The Steering Committee decided that although the size criteria from inventory was not met for these areas added back into the inventory, the manageability of these areas would be determined in evaluation.

Phase 3 Inventory Results

For a detailed description of the Phase 3 results, please see Appendix B: Detailed Inventory Results. A summary of acreages by phase is available in Table 3.

Table 3: Comparison of Phase 1, 2, and 3 Inventory Results.

District	PHASE 1 Inventory Total Acres	PHASE 2 Inventory Total Acres	PHASE 3 Inventory Total Acres
Mount Taylor	113,429	63,886	55,810
Magdalena	349, 263	291,458	327,563*
Mountainair	35,028	22,621	22,615
Sandia	4,740	4,523	4,411
Total Acres	502,460	382,488	410,399

*A number of areas were added back into the inventory based on public comment. See Appendix B: Detailed Inventory Results for more detail.

Evaluation of Lands that may be Suitable for Inclusion in the National Wilderness Preservation System

Phase 1 Evaluation Process and Criteria

The next step in the plan revision process for inventorying and evaluating lands that may be suitable for inclusion in the National Wilderness Preservation System is to evaluate each area on the inventory map for wilderness characteristics. Evaluation of wilderness characteristics is done using five criteria set forth in the Wilderness Act of 1964 and required in the Forest Service Handbook final directives FSH 1909.12, Chapter 70, Section 72.1. A summary of these five criteria is as follows:

1. Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable (apparent naturalness).
2. Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation. The word "or" means that an area only has to possess one or the other. The area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre.
3. Evaluate how an area of less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.
4. Evaluate the degree to which an area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value. These values are not required in an area to be present, but their presence should be identified and evaluated where they exist.

5. Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

The Cibola National Forest plan revision IDT team developed draft questions and measures to address each of these five criteria, and to provide a consistent way to evaluate each area in the inventory for wilderness characteristics in a comparable manner. These are outlined in Appendix D: Evaluation Criteria and Narrative Form. During the public comment period held from July 20, 2015 to September 25, 2015, the public was asked to comment on this criteria, and to apply the criteria to inventoried areas.

Once the public comment period ended, recommended changes to the evaluation criteria were considered and the Steering Committee made a final decision on the evaluation criteria (Appendix D).

From December 2015 through February 2016, the Cibola National Forest core planning team held a series of meetings at the four mountain districts to evaluate areas on the draft Phase 3 Inventory maps. The extended IDT present at each of these district meetings consisted of District Forest Service personnel as well as the members of the cooperating agencies participating in each District's landscape team. This extended IDT evaluated all Phase 3 inventory areas for wilderness characteristics. This evaluation was conducted using the evaluation criteria in the 2012 Planning Rule final directives with the associated measures, supporting information, and considerations defined by the Cibola National Forest through public participation (Appendix D).

In addition to evaluating inventoried areas for wilderness character, the extended IDT also made a recommendation on a preferred proposal for the management of each area. The extended IDT also recommended alternative ways to manage each area, including recommendations received from public comment.

The steps for the evaluation process and applying the evaluation criteria are identified below. This process was done for each area identified on the draft Phase 3 inventory maps.

1. **The extended IDT evaluated each area using each criterion's questions and considering geospatial data, interdisciplinary field knowledge, and public comment.** The team considered all evaluation-related comments received during all Forest Plan Revision comment periods.
2. **Using the Evaluation Criteria and Narrative Forms (Appendix D), the IDT captured all notes, discussion, and data from the meetings, resulting in wilderness evaluation narratives.**
3. **The IDT assigned each individual question a finding of High wilderness character, Moderate wilderness character, or Low wilderness character, using the thresholds identified in Appendix E: Evaluation Criteria Thresholds.** The team summarized the findings and discussion points pertinent to each question. These findings and discussions informed the Cibola National Forest Supervisor and Steering Committee as a part of their decision making process on how to manage the area in the future.
4. **Once each criterion was assigned a finding, the IDT held a qualitative discussion considering each criterion's findings, public comment, professional interdisciplinary expertise, field knowledge, and other data to recommend whether any portion of the inventoried area had wilderness character.** The IDT documented the portions of inventoried areas which had wilderness character.
5. **The IDT also documented a preferred proposal and any suggested alternatives for that area's management that were received through public comment.** The IDT recommended a proposal(s) during the evaluation meetings based on 1) consideration of comments received

from all sources and Forest Service internal data, and 2) the high, moderate, or low findings of the wilderness character questions. The proposal(s) addressed how the area should be managed, i.e., as wilderness or as non-wilderness with some special emphasis. If the proposal was the latter, it included recommendations for how the area should be managed.

6. **The Cibola National Forest Plan Revision Steering Committee reviewed all IDT recommendations on wilderness character and made decisions on which inventoried areas, or portions thereof, contained wilderness character.**

The Cibola National Forest Plan Revision Steering Committee convened in the spring of 2016 to make decisions on which of the areas from the Phase 3 inventory maps had wilderness character. Additionally, the Steering Committee decided on a preferred proposal for management of each area, as well as alternatives, to consider in development of the draft forest plan and any alternative draft plans. These decisions were shared for comment and input at a Cibola National Forest Plan Revision Retreat held in March 2016 with the cooperating agencies and Cibola National Forest personnel. Following the Cibola National Forest Plan Revision Retreat, the Steering Committee made a decision on final draft Phase 1 Evaluation results.

For a detailed explanation of the evaluation process, please see Appendix C: The Evaluation Process.

Phase 1 Evaluation Results

The Phase 1 Evaluation maps, and associated wilderness evaluation narratives, will be released to the public for comment and sharing July 18, 2016.

For detailed results of evaluation for each Phase 3 inventory area, please see the Evaluation Criteria and Narrative Forms for each area, available on the Cibola National Forest Plan revision website.

A summary of total acres of wilderness character for each Mountain District is as follows:

- Mount Taylor Ranger District: 2 areas totaling 15,463 acres (14% remaining from Phase 1 Inventory)
- Magdalena Ranger District: 19 areas totaling 73, 717 acres (21% remaining from Phase 1 Inventory)
- Mountainair Ranger District: 6 areas totaling 4,221 acres (12% remaining from Phase 1 Inventory)
- Sandia Ranger District: 2 areas totaling 922 acres (19% remaining from Phase 1 Inventory)

Total acres of wilderness character on the Cibola National Forest Mountain Districts: 94,323 acres
(19% remaining from Phase 1 Inventory)

Next Steps- Analysis and Possible Recommendation

Along with the Phase 3 Inventory maps and Phase 1 Evaluation results, the Cibola National Forest will release a preliminary draft forest plan and conceptual alternative draft plans for further public comment on July 18, 2016. This preliminary draft forest plan and conceptual alternatives will contain areas, or portions thereof, from the evaluation results to be considered as recommended wilderness. Inventoried areas, or portions thereof, found to contain wilderness character (per Cibola National Forest Plan Revision Steering Committee decisions) will be analyzed in either the draft forest plan or one of the alternative draft forest plans. Please see the preliminary draft forest plan and conceptual alternatives

1 for more details. Comments will be used to make adjustments and prepare a final draft forest plan,
2 alternative draft forest plans, and draft environmental impact statement, which will be tentatively
3 available for review in the spring of 2017. A draft record of decision and final environmental impact
4 statement will tentatively occur in winter/spring of 2018 with the opportunity for objections.

5 Once the forest plan is finalized, the final environmental impact statement is released, and a record of
6 decision is signed, the Cibola National Forest Supervisor may recommend suitable lands for National
7 Wilderness Preservation System designation to the Chief of the U.S. Forest Service, if the record of
8 decision contains suitable lands. Such recommendation may then be forwarded to the Secretary of
9 Agriculture, and ultimately to Congress, for its consideration and possible designation. Congress has
10 reserved the authority to make final decisions on wilderness designation.

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Appendix A. Substantially Noticeable Definition Matrix

Defining “Substantially Noticeable”

The term “substantially noticeable” is not directly defined in the Forest Service Handbook 1909.12, Chapter 70 for inventory and evaluation of lands that may be suitable for inclusion in the NWPS⁸. In November and December 2014, the Cibola National Forest interdisciplinary team (IDT) developed a definition of ‘substantially noticeable’ for the specific improvements listed in the Forest Service Handbook⁹. The use of the term “improvements” in this context is taken from the Forest Service Handbook, and means the evidence of past human activities in the area as a whole.

An IDT of resource specialists drafted a matrix for the definitions of “substantially noticeable.” This Substantially Noticeable Definition Matrix is based on the type of materials used to construct or develop the improvement, connected aspects associated with utilizing the improvement, and how evident the improvement and associated features are on the landscape as a whole. Principles for scenery management were considered by the IDT to create the Substantially Noticeable Definition Matrix, as scenery management is the best available science. These principles consider the degree to which the landscape appears unaltered by human activities (deviations from the natural character may be present, but if present they repeat the form, line, color, texture, and pattern common to the surrounding landscape, so completely that they are not evident) to the average forest visitor. Consideration of substantially noticeable improvements is based on the existing condition of improvements on the ground at the time of inventory, and does not consider future actions or impacts that could potentially make a feature look more or less substantially noticeable.

Assumptions Developed When Applying the Substantially Noticeable Definition Matrix

Cultural Landscape Features

Some structures such as log cabins, split rail (post and log) fences, or orchards are considered positive cultural elements when looking at landscape character. Windmills, made with natural appearing materials or colors, are often also considered a positive cultural element in scenery management. This complements FSH 1909.12 Chapter 70, 71.22b, which states historic structures, dwellings, and other relics of past occupation, when they are considered part of the historic and cultural landscape of the area, may be included in the inventory of lands that may be suitable for inclusion the NWPS.

Range Improvements from a Scenery Management Perspective¹⁰

Ranching is a part of our cultural heritage, and range structures have become accepted as necessary parts of characteristic landscapes. Range structures can be grouped into three categories: fences, corrals and related structures, and water developments.

Fences

Fences would be more evident if a fence line crosses vegetative openings, is located part way up a slope and viewed against a landform, silhouetted against the sky, or constructed solely of unnatural, reflective materials. Soil disturbance and clearing of vegetation for fence construction and maintenance may

⁸ FSH 1909.12 Chapter 70, 71.22b

⁹ FSH 1909.12 Chapter 70, 71.22b

¹⁰ U. S. Department of Agriculture, Forest Service. 1977. National Forest Landscape Management, Volume 2, Chapter 3 - Range (Agriculture Handbook 484)

cause undesirable deviations in color and texture due to exposed soils. When fences are located within forested vegetation for partial or total screening from most vantage points, they are less evident.

Corrals and Related Structures

This category includes all structures used to handle or work livestock. These types of structures would be more evident if they are constructed of unnatural, reflective materials with little or no vegetative screening. When structures are constructed with natural materials, painted natural colors, or located where existing landforms and vegetation provide for partial or total screening from most vantage points, they are less evident.

Water Developments

This category includes reservoirs, spring or seep developments, wells, trick tanks, storage tanks, pumps, pipelines (diameter of greater than 6 inches¹¹), and drinking troughs. These types of developments would be more evident if they are constructed of unnatural, reflective materials with little or no vegetative screening. Soil disturbance and clearing of vegetation for construction may cause undesirable deviations in color and texture due to exposed soils. When developments are constructed with natural materials, painted natural colors, or located where existing landforms and vegetation provide for partial or total screening from most vantage points, they are less evident. If as much of the structure as possible is placed at or below ground level, the structure is also less evident.

Linear Features

For linear improvements, such as fences or water pipelines, the determination for whether the improvement is substantially noticeable is not based on a person walking parallel to the feature with a continuous view of the improvement. Rather, the determination is based on a person potentially seeing the feature from different vantage points while traveling cross country in the area.

Structures

Structures, dwellings, and other relics of past occupation, when they are considered part of the historic and cultural landscape of the area, may be included in the inventory of lands that may be suitable for inclusion into the NWPS.¹²

Routes

All NFS Roads ML2-5 were removed from consideration through the inventory roads criteria; ML 1 NFS Roads, unauthorized routes, and motorized trails were not removed. These routes are considered in this inventory phase in combination with other improvements listed in the Substantially Noticeable Definition Matrix, as well as ~~and~~ those identified by the public (e.g. stock tanks, wells, etc.). These routes that provide access to an improvement may be excluded from the inventory area if the improvement is determined to be substantially noticeable, using the Substantially Noticeable Definition Matrix. “Cherry stemming”^[1] of these routes and the improvement may be used to exclude the road and associated improvement. If a route extends beyond an identified improvement, it is no longer associated with that improvement; it would not be excluded beyond that improvement, but would be further considered in the evaluation phase.

¹¹ It should be noted that pipelines with diameters of greater than 6 inches are typically commercial or agricultural.

¹² FSH 1909.12 Chapter 70, 71.22b #11

^[1] The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) (road buffer screening from the Phase 1 Inventory process.

Known unauthorized routes were not mapped as part of either inventory phase. Those routes will be considered in the evaluation phase as part of the apparent naturalness and degree to which the area may be managed to preserve its wilderness characteristics.

Improvements Similar to Those Found in Existing Designated Wilderness

Substantially noticeable improvements occurring in existing wilderness on the Cibola National Forest (designated in 1978 or 1980) do not influence the consideration of whether the same or similar improvement is substantially noticeable or not substantially noticeable using the final directives of FSH 1909.12 Chapter 70. The final FSH 1909.12 Chapter 70 directives and the Substantially Noticeable Definition Matrix will be used to determine if improvements are substantially noticeable. The fact that the same type of improvement may occur in designated wilderness will not influence whether an improvement within an inventory area is substantially noticeable or not substantially noticeable.

Finalization of Forest Service Handbook Directives during Phase 2 Inventory

Final Forest Service Handbook directives (1909.12 Chapter 70) were released on January 30, 2015. The draft directives were used by the Cibola National Forest up to that point, and then the final directives were used starting January 30th. One notable difference between the draft and final directives is that the draft directives included historic mining and mining activity, but the final directives do not differentiate between the two. Mining activity is the language used in the final directives. The Substantially Noticeable Definition Matrix includes both historic mining and mining activity, and was not changed since historic mining would be considered with mining activity. Therefore, the Substantially Noticeable Definition Matrix is still consistent with the improvements listed in the final directives.

Applying the Substantially Noticeable Definition Matrix

The IDT applied the Substantially Noticeable Definition Matrix during district meetings held between January and March of 2015. The team reviewed each inventory area using the Substantially Noticeable Definition Matrix, corporate infrastructure data in Forest Service geodatabases, aerial photography, and public comments¹³, including data and photos submitted by the public. For those improvements for which there is no corporate record, local knowledge was applied if available.

The following improvements types were considered:

- vegetation treatment improvements
- timber harvest improvements
- range improvements
- historic mining improvements
- mining activity improvements
- watershed treatment improvements
- other improvements identified by the public or Forest Service personnel including but not limited to: utility rights-of-way, recreation improvements, environmental monitoring sites, and so forth.

The IDT reviewed the above improvements using the Substantially Noticeable Definition Matrix. Using the Substantially Noticeable Definition Matrix, the team determined whether these improvements were substantially noticeable or not substantially noticeable. The Substantially Noticeable Definition Matrix aided in determining whether or not the areas with substantially noticeable improvements were

¹³ Note: Information collected that was not specific to improvements was noted for consideration in later phases of this process.

1 included or excluded in the Phase 2 inventory results. These determinations and rationale were
2 documented (see Appendix B: Detailed Phase 2 Results). The team also applied the Substantially
3 Noticeable Definition Matrix to any improvements within areas requested as additions to the inventory
4 by the public during the Phase 1 comment period. These results were documented in the same manner.
5 Substantially Noticeable Definition Matrix Table

6 The following table includes the other improvements listed in FSH 1909.12 Chapter 70 and a matrix of
7 improvements which are substantially noticeable. The team used the following data sources when
8 reviewing all improvement types listed in the matrix table: 2011 and 2014 NAIP aerial imagery (National
9 Agricultural Imagery Program), local or field based knowledge of Forest Service personnel, collaborative
10 mapping tool public comments and written public comments, data layers and GPS information
11 submitted with public comments, photographs submitted with public comments, and FOIA response
12 data.

13 Each improvement contains examples of features that may be considered substantially noticeable, but
14 examples are not intended to infer that these features will always be removed or that these features will
15 be considered substantially noticeable as standalone features. The examples listed must meet the
16 definition of substantially noticeable to be removed.

1 **Table 4. Substantially Noticeable Definition Matrix Table**

Improvement Types FSH 1909.12 Chapter 70 71.22b – Other Improvements	Substantially Noticeable (exclude affected area)	Data Protocol for Substantially Noticeable
<u>Vegetation treatments</u>	<p>Treatments create deviations in form, line, color, texture and pattern in the surrounding natural landscape. The natural landscape appears altered by vegetation treatment improvements. Changes in canopy cover and forms introduced by treatment unit shape are evident and contrast with the surrounding natural landscape. Edges of treatment units are linear or abrupt. Concentrations of treatments may create an unnatural pattern across the landscape.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • high (greater than 1 foot) stumps or numerous stumps • high amounts of slash, slash piles • visible decks, landings, skid trails, access roads associated with vegetation treatment improvements • edges of treated area are evident, abrupt, not feathered or strongly defined • change in canopy cover is evident • even spacing of trees due to vegetation treatment is evident 	<p><u>Data Sources:</u></p> <p>General Technical Report 310 – Restoring Composition and Structure in Southwestern Frequent-Fire Forests Forest Activities Tracking System (FACTS) codes and spatial data</p> <p>Vegetation History data layers for Mount Taylor Ranger District</p> <p>Firewood cutting or other subsistence activities locations</p> <p>Spatial data for fuels reduction if not in FACTS database</p> <p>Range Vegetation Treatments: Range plowed and seeded areas, pushes, chaining, etc.</p> <p>Aerial photography review and field based knowledge of the ground conditions was the determining factor, not the FACTS activity code</p> <p>Step 1. Coarse filter. Overlay vegetation treatment spatial data</p> <p>Step 2. Review aerial photography and recent photographs</p> <p>Step 3a. Map area affected by vegetation treatment and associated improvements</p> <p>Step 3b. Review public comments to inform or validate mapped improvements and build corporate knowledge</p> <p>Step 4. Consider distribution, frequency and context of substantially noticeable improvements</p> <p>Step 5: If a substantially noticeable determination cannot be made with data sources mentioned, complete field verification to make a substantially noticeable determination for that site specific improvement</p>

Improvement Types FSH 1909.12 Chapter 70 71.22b – Other Improvements	Substantially Noticeable (exclude affected area)	Data Protocol for Substantially Noticeable
<u>Timber harvest areas.</u>	<p>Treatments create deviations in form, line, color, texture and pattern in the surrounding natural landscape. The natural landscape appears altered by vegetation treatment improvements. Changes in canopy cover and forms introduced by treatment unit shape are evident and contrast with the surrounding natural landscape. Edges of treatment units are linear or abrupt. Concentrations of treatments may create an unnatural pattern across the landscape.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • high (greater than 1 foot) stumps or numerous stumps • high amounts of slash, slash piles • skyline corridors • visible decks, landings, skid trails, access roads associated with vegetation treatment improvements • edges of treated area are evident, abrupt, not feathered or strongly defined • change in canopy cover is evident • even spacing of trees due to timber harvest is evident 	<p><u>Data Sources:</u></p> <p>General Technical Report 310 – Restoring Composition and Structure in Southwestern Frequent-Fire Forests</p> <p>Timber harvest records:</p> <p>Forest Activities Tracking System (FACTS) codes and spatial data</p> <p>Hard copy timber atlas available at Mount Taylor and Magdalena District Offices. No timber atlases could be found for the Mountainair and Sandia Ranger Districts</p> <p>Vegetation History data layers for Mount Taylor Ranger District</p> <p>Approved firewood cutting areas</p> <p>Aerial photography review and field based knowledge of the ground conditions was the determining factor, not the activity code</p> <p>Step 1. Coarse filter. Overlay timber harvest spatial data</p> <p>Step 2. Review aerial photography and recent photographs</p> <p>Step 3a. Map area affected by timber harvest and associated improvements</p> <p>Step 3b. Review public comments to inform or validate mapped improvements and build corporate knowledge</p> <p>Step 4. Consider distribution, frequency and context of substantially noticeable improvements</p> <p>Step 5: If a substantially noticeable determination cannot be made with data sources mentioned, complete field verification to make a substantially noticeable determination for that site specific improvement</p>

Improvement Types FSH 1909.12 Chapter 70 71.22b – Other Improvements	Substantially Noticeable (exclude affected area)	Data Protocol for Substantially Noticeable
<u>Range improvement areas</u>	<p>Structural and non-structural improvements contrast with the form, line, color and texture of the surrounding landscape. Structural improvements begin to dominate the setting.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • Improvements which are reflective, made from non-natural materials, or painted colors that conflict with the surrounding landscape. • Linear improvements which are sited to run perpendicular to the natural terrain or on ridge tops • Improvements are located where landforms or vegetation provides little or no visual screening from most vantage points • Examples of structural improvements that may be substantially noticeable include: galvanized tanks, galvanized fences or windmills, galvanized corrals, solar panels, wildlife drinkers. • Ground disturbing improvements which expose soils, causing undesirable deviations in color and texture due to exposed soils. • Mechanized or motorized structural improvements • Water pipelines located above ground which are greater than 6 inches in diameter and a color which stands out against the landscape (i.e., white) and/or run perpendicular to the slope with little or no visual screening from most vantage points. • Concentrations of range improvements may create an unnatural pattern across the landscape. <p>Whether these structural improvements are substantially noticeable will depend on slope and surrounding vegetation which can affect visibility of the feature and the concentration of features present.</p>	<p><u>Data Sources:</u></p> <p>Grazing allotments and improvements maps</p> <p>Constructed features spatial data (including wildlife improvements): fences, pipelines, stock tanks, drinkers, etc.</p> <p>Magdalena Ranger District Range Improvements data layers</p> <p>Wildlife improvements spatial data available for Magdalena Ranger District (HSP point features)</p> <p>Spatial data for wildlife improvements and springs: 1) Wildlife impoundments 2) Water wells or water impoundments 3) spring locations 4) Locations of pumps, water improvement infrastructure, or water line</p> <p>Step 1. Coarse filter. Overlay range spatial data</p> <p>Step 2. Review aerial photography and recent photographs</p> <p>Step 3a. Map area affected by range improvements</p> <p>Step 3b. Review public comments to inform or validate mapped improvements and build corporate knowledge</p> <p>Step 4. Consider distribution, frequency and context of substantially noticeable improvements. Consider cumulative effect of many small improvements.</p> <p>Step 5: If a substantially noticeable determination cannot be made with data sources mentioned, complete field verification to make a substantially noticeable determination for that site specific improvement</p> <p>Footnotes:</p> <p>Structural improvements (fences, water troughs and so forth)</p> <p>Non-structural improvements (chaining, burning, spraying, potholing and so forth)</p>

Improvement Types FSH 1909.12 Chapter 70 71.22b – Other Improvements	Substantially Noticeable (exclude affected area)	Data Protocol for Substantially Noticeable
Areas of <u>historic mining</u>	<p>Areas of historic mining where improvements create deviations in form, line, color, texture and pattern in the surrounding natural landscape and are not considered part of the historical and cultural landscape of the area. The natural landscape appears altered by historic mining impacts.</p> <p>Changes in canopy cover due to vegetative clearing and landforms altered by extraction are evident and contrast with the surrounding natural landscape. Edges of vegetation clearing are linear or abrupt. Ground disturbing improvements which expose and compact soils, causing undesirable deviations in color and texture due to exposed soils. Compacted soils which re-vegetate more slowly causing color deviations to persist. Concentrations of treatments may create an unnatural pattern across the landscape. Improvements are not partially or completely screened by topography or vegetation from most vantage points.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • evident ground disturbance exposing soils at a scale larger than prospect holes, prospect pits, shafts, diggings, or adits • Head frames made of unnatural materials and large enough to dominate the setting • landform altering extraction which has not re-vegetated • tailings or slump piles • plastic or metal pipes on the ground • structures, unless they are part of the historical or cultural landscape. 	<p><u>Data Sources:</u></p> <p>Spatial data: mining claim locations, both active and inactive:</p> <p>active and inactive mine claims available from Bureau of Land Management (www.blm.gov/lr2000)</p> <p>Abandoned and Inventoried Mines (AML-12 and AML-13 data layers), mining activity data inventory</p> <p>Any known sites of chemical contaminations. Most locations were not within an inventory area.</p> <p>Historic mining district locations</p> <p>Step 1. Coarse filter. Overlay spatial data</p> <p>Step 2. Review aerial photography and recent photographs</p> <p>Step 3a. Map area affected historic mining</p> <p>Step 3b. Review public comments to inform or validate mapped improvements and build corporate knowledge</p> <p>Step 4. Consider distribution, frequency and context of substantially noticeable improvements</p> <p>Step 5: If a substantially noticeable determination cannot be made with data sources mentioned, complete field verification to make a substantially noticeable determination for that site specific improvement</p> <p>Footnotes:</p> <p>Abandoned mine – no active operator</p> <p>Active claim – current interest, but an activity may not be occurring</p> <p>Inactive claim – not under mining claim.</p> <p>Concentrations indicate mineral potential</p> <p>Historic mining part of the historical and cultural landscape of the area - Historic mining district, heritage cultural sites.</p>

Improvement Types FSH 1909.12 Chapter 70 71.22b – Other Improvements	Substantially Noticeable (exclude affected area)	Data Protocol for Substantially Noticeable
Areas of <u>mining activity</u>	<p>Areas of mining activity where improvements create deviations in form, line, color, texture and pattern in the surrounding natural landscape. The natural landscape appears altered by mining activity impacts. Changes in canopy cover due to vegetative clearing and landforms altered by extraction are evident and contrast with the surrounding natural landscape. Edges of vegetation clearing are linear or abrupt. Ground disturbing improvements which expose and compact soils, causing undesirable deviations in color and texture due to exposed soils. Compacted soils which re-vegetate more slowly causing color deviations to persist. Concentrations of treatments may create an unnatural pattern across the landscape. Improvements are not partially or completely screened by topography or vegetation from most vantage points.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • Evident ground disturbance exposing soils at a scale larger than prospect holes, prospect pits, shafts, diggings, or adits • Head frames made of unnatural materials and large enough to dominate the setting • landform altering extraction which has not re-vegetated • tailings or slump piles • borrow pits • plastic or metal pipes on the ground 	<p>Data source:</p> <p>Spatial data: mining claim locations, both active and inactive:</p> <p>active and inactive mine claims available from Bureau of Land Management (www.blm.gov/lr2000)</p> <p>Abandoned and Inventoried Mines (AML-12 and AML-13 data layers), mining activity data inventory</p> <p>Any known sites of chemical contaminations. Most locations were not within an inventory area.</p> <p>Step 1. Coarse filter. Overlay spatial data</p> <p>Step 2. Review aerial photography and recent photographs within 5 years</p> <p>Step 3a. Map area affected mining activity</p> <p>Step 3b. Review public comments to inform or validate mapped improvements and build corporate knowledge</p> <p>Step 4. Consider distribution, frequency and context of substantially noticeable improvements</p> <p>Step 5: If a substantially noticeable determination cannot be made with data sources mentioned, complete field verification to make a substantially noticeable determination for that site specific improvement</p>

Improvement Types FSH 1909.12 Chapter 70 71.22b – Other Improvements	Substantially Noticeable (exclude affected area)	Data Protocol for Substantially Noticeable
<u>Watershed treatment areas</u>	<p>Watershed treatment areas where improvements create deviations in form, line, color, texture and pattern in the surrounding natural landscape. The natural landscape appears altered by improvements. Changes in canopy cover due to vegetative clearing associated with improvements and landforms altered by improvements are evident and contrast with the surrounding natural landscape. Ground disturbing improvements which expose and compact soils, causing undesirable deviations in color and texture due to exposed soils. Compacted soils which re-vegetate more slowly causing color deviations to persist.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • Improvements made of non-natural materials • Terraced areas such as what is in Bernalillo Research Natural Area. • Post-fire treatments (i.e., filter dams) to control flooding, which are permanent and made of non-natural materials. <p>Consider on the ground appearance rather than aerial view appearance for channel structures. Although one can see improvements from an aerial view, one rarely notices the improvement on the ground unless next to it.</p>	<p>Data source:</p> <p>Spatial data: National Hydrography Dataset (NHD) water points and waterbodies</p> <p>Watershed improvements identified by specialists using local field knowledge</p> <p>Step 1. Coarse filter. Overlay spatial data</p> <p>Step 2. Review aerial photography and recent photographs</p> <p>Step 3a. Map area affected by watershed treatments</p> <p>Step 3b. Review public comments to inform or validate mapped improvements and build corporate knowledge</p> <p>Step 4. Consider distribution, frequency and context of substantially noticeable improvements</p> <p>Step 5: If a substantially noticeable determination cannot be made with data sources mentioned, complete field verification to make a substantially noticeable determination for that site specific improvement</p> <p>Footnote: Watershed treatment areas (such as contouring, diking, channeling)</p>

Improvement Types FSH 1909.12 Chapter 70 71.22b – Other Improvements	Substantially Noticeable (exclude affected area)	Data Protocol for Substantially Noticeable
<u>Other Improvements</u>	Other improvements which create deviations in form, line, color, texture and pattern in the surrounding natural landscape. The natural landscape appears altered by improvements. Changes in canopy cover due to vegetative clearing associated with improvements and landforms altered by improvements are evident and contrast with the surrounding natural landscape. Ground disturbing improvements which expose and compact soils, causing undesirable deviations in color and texture due to exposed soils. Compacted soils which re-vegetate more slowly causing color deviations to persist.	<p>Recreation improvements: open or decommissioned. As a general rule, developed sites should not be included. Areas with minor, easily removable recreation developments may be included in the inventory. (FSH 1909.12 Chapter 70, 71.22b #7). The team used substantially noticeable definition for Range Improvements for this type of improvement.</p> <p>INFRA database for: National Forest System roads, decommissioned roads, bridges. Unauthorized roads or routes were not mapped as part of either inventory Phase (FSH 1909.12 Chapter 70, 71.22a and see page 8)</p> <p>INFRA database for Designated Trails: Motorized and non-motorized trails were not excluded from either inventory Phase.</p> <p>Constructed Features: Environmental monitoring site locations for air, water, rangeland or soil, including weather stations. The team used substantially noticeable definition for Range Improvements or Mining Activity for this type of improvement.</p> <p>Constructed Features: communication towers Considered as directed in FSH 1909.12 Chapter 70, 71.22b #4. Most were excluded in Phase I due to proximity to roads. In Phase II the team used substantially noticeable definition for Range Improvements or Mining Activity for this type of improvement.</p> <p>Utility rights of way: identified with constructed features, aerial imagery, and rights-of-way information on file. Considered as described on page 1. Any identified in Phase II used the same considerations.</p>

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Appendix B. Detailed Inventory Results

The IDT conducted a detailed review of each inventory area with the inventory criteria, public comments, and the Substantially Noticeable Definition Matrix. The improvements listed in the FSH 1909.12 Chapter 70, 71.22b were reviewed and results documented. The IDT presented results to the Steering Committee. The tables below summarize the conclusions for each inventory area in each phase of Inventory.

Table 5. Mount Taylor Ranger District, Detailed Inventory Results

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D2_5K1	5,065	Exclude from inventory. Once substantially noticeable timber harvest and range improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 4,481 acres.	N/A	N/A	N/A
D2_5K2	5,494	Include in inventory. Modified. Substantially noticeable vegetation treatment, timber harvest, and range improvements were excluded. Size criteria are met (5,000 acres or more). Field verification needed: <u>Range Improvements:</u> Fence line across northern portion of area (North boundary fence) runs perpendicular to terrain, runs across open pinyon-juniper, not evident on aerial photography, field verify when accessible. <u>Other Improvements:</u> Railroad Routes identified by public-Field verify to see if they are part of cultural and historical landscape or if it is part of historic logging. Identified homestead site with structure remnants and orchard remnants. Field verify to see if it is part of cultural and historical landscape.	5,378	Include in inventory. No change after field verification. Field verified range improvements were determined to not be substantially noticeable to the area as a whole. Size criteria are met (5,000 acres or more).	5,378

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D2_5K3	6,266	<p>Include in inventory. Modified. Substantially noticeable timber harvest and range improvements were excluded. Size criteria are met (5,000 acres or more).</p> <p>Field verification needed: <u>Timber Improvements</u>: Vegetation History data layer shows vegetation improvement near Ramah tank as a small commercial sale for saw timber dated 1981. On aerial photography, the change in forest canopy is evident and edges of harvest unit is evident on aerial photography. It may have evident stumps and should be field verified when accessible.</p>	5,634	<p>Include in inventory. Modified. Field verified timber harvest improvements were determined to not be substantially noticeable to the area as a whole. Field verification confirmed location and access routes of range improvements determined to be substantially noticeable in Phase 2, and these range improvements were excluded. Size criteria are met (5,000 acres or more).</p>	5,564
D2_5K4	6,446	<p>Exclude from inventory. Once substantially noticeable timber harvest and range improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 4,458 acres.</p>	N/A	N/A	N/A

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D2_5K5	6,118	<p>Include in inventory. Modified. Substantially noticeable vegetation treatment, timber harvest, range and watershed improvements were excluded. Size criteria are met (5,000 acres or more).</p> <p>Field verification needed: <u>Timber Improvements:</u> 1) Northern and eastern portion of area identified in corporate database as shelterwood removal cut 1987, unit edge is topographic break, harvest on top of mesa, two evident age classes when looking across landscape. Field verify portion along northern area boundary-Bluewater and Tusas Mesa timber sale to determine if stumps are evident across sale. 2) Along northern and western portion of area, partially within area identified in corporate database as Overstory removal cut 1990, shelterwood removal cut 1987, are stumps evident across sale? Field verify portion along northern area boundary-Bluewater and Tusas Mesa timber sale to determine if stumps are evident across sale. <u>Other improvements:</u> Railroad Routes identified by public-Field verify to see if they are part of cultural and historical landscape or if it is part of historic logging. Woodcutting area identified by public that falls within timber harvest area identified for field verification.</p>	5,128	<p>Excluded from inventory. Field verified timber improvements were determined to be substantially noticeable to the area as a whole. Field verification confirmed location of timber harvest improvements determined to be substantially noticeable, and these improvements were excluded. Once substantially noticeable timber harvest improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition.</p>	N/A

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D2_5K6	12,194	<p>Include in inventory. Modified. Substantially noticeable vegetation treatment, timber harvest, and range improvements were excluded. Size criteria are met (5,000 acres or more).</p> <p>Field verification needed: <u>Vegetation Treatment Improvements:</u> Plantation along northern edge, proposed as part of Ojo Redondo sale. <u>Timber Improvements:</u> 1) Northern portion of area identified as 1986 Ojo Redondo timber sale-between roads 50R and 50RC. Unit edges not evident on aerial photography. Field verify for stumps and/or slash. 2) Timber atlas identified Heath Timber Sale 1959-1960-around section 33 and 34, between Road 50R and 2028. Assume high stumps, due to different contracting specifications, which may be still present due to climate. Locations of these effects are not specifically known. The area has regenerated, unit edges not evident on aerial photography, but slash may still be present. Field verify for stumps and/or slash. <u>Range Improvements:</u> Yellow spring-spring well development. Field verify to see if it has drinker, fenced enclosure around spring or holding pen. <u>Other Improvements:</u> Manmade structure identified by public. Location same as Yellow Spring identified with range for field verification.</p>	6,392	<p>Include in inventory. Modified. Field verified range improvements were determined to be substantially noticeable to the area as a whole. Field verification confirmed location and access routes of range improvements determined to be substantially noticeable, and these range improvements were excluded. Size criteria are met (5,000 acres or more).</p>	6, 321
D2_5K7	5,131	<p>Exclude from inventory. Once substantially noticeable timber harvest improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 4,742 acres.</p>	N/A	N/A	N/A

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D2_5K8	9,904	<p>Include in inventory. Modified. Substantially noticeable timber harvest, range, and mining improvements were excluded. Size criteria are met (5,000 acres or more).</p> <p>Field verification needed: <u>Timber Improvements</u>: Product areas for Canovitas Latillas. Needs follow up and location. <u>Mining Improvements</u>: Section 28 and 29. Ground disturbance and exposed soils evident on aerial photography. Color difference is evident, access routes associated are evident, gas wells. Identified for field verification. T12N R7W Sec. 29.</p>	8,116	<p>Include in Inventory. Modified. Field verified timber improvements were determined to be outside area boundaries. Public comment received that substantially noticeable range improvements were present in area. Field verification determined range improvements to be substantially noticeable to the area as a whole. Field verification confirmed location of range improvements determined to be substantially noticeable, and these range improvements were excluded. Size criteria are met (5,000 acres or more).</p>	5,705
D2_5K9	7,319	<p>Exclude from inventory. Once substantially noticeable range improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 3,981 acres.</p>	N/A	N/A	N/A

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D2_ADJ2 (was D2_5K10)	20,251	<p>Include in inventory. Modified. Substantially noticeable range improvements were excluded. Size criteria are met (5,000 acres or more or if less than 5,000 acres, contiguous to Bureau of Land Management, Ignacio Chavez Wilderness Study Area).</p> <p>Field verification needed: <u>Timber Improvements:</u> Indios Timber Sale in southern portion of area identified in corporate database as Single tree selection cut 1973. Unit edges blend with surrounding vegetation on aerial photography. All of Indios Timber sale in this area needs to be field verified to check for stumps, slash and whether the timber harvest area is substantially noticeable on the area as a whole. <u>Range Improvements:</u> El Dado Spring-spring well development that needs field verification. Appears to have has vegetative and topographic screening on aerial photography.</p>	13,732	<p>Include in inventory. Modified. Field verified range improvements were determined to be substantially noticeable to the area as a whole. Field verification confirmed location and access routes of range improvements determined to be substantially noticeable, and these range improvements were excluded. Size criteria are met (5,000 acres or more).</p>	13,296
D2_5K11	9,687	<p>Exclude from inventory. Once substantially noticeable range improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 2,455 acres.</p>	N/A	N/A	N/A

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D2_ADJ3 (was D2_5K12)	19,553	<p>Include in inventory. Modified. Substantially noticeable range improvements were excluded. Size criteria are met (5,000 acres or more or if less than 5,000 acres, contiguous to Bureau of Land Management, Chamisa Wilderness Study Area)</p> <p>Field verification needed: <u>Timber Improvements</u>: Field verification for illegal cutting in T15N R4W Sec. 20. <u>Range Improvements</u>: Field verify fence in T15N R4W Sec. 28 and determine if substantially noticeable.</p>	19,505	<p>Include in inventory. Modified. Field verified range improvements were determined to not be substantially noticeable to the area as a whole. Public comment received that a 40 acre parcel removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are met (5,000 acres or more).</p>	19,545
D2_ADJ1		<p>Not added to inventory. Public comment requested the area be added to the inventory since area was adjacent to Bureau of Land Management Wilderness Study Area. After review of the area, it was determined that it is not adjacent to Bureau of Land Management, Chamisa Wilderness Study Area or Ignacio Chavez Wilderness Study Area</p>	N/A	<p>Not added to inventory. Public comment requested the area be added to the inventory since area was adjacent to Bureau of Land Management Wilderness Study Area. After review of the area, it was determined that it is not adjacent to Bureau of Land Management, Chamisa Wilderness Study Area or Ignacio Chavez Wilderness Study Area, and did not meet the size criteria (925 acres), so did not meet inventory criteria.</p>	N/A

1 **Table 6. Magdalena Ranger District, Detailed Inventory Results¹⁴**

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_5K1	14,410	Include in inventory. Modified. Substantially noticeable vegetation treatment, range, and mining improvements were excluded. Size criteria are met (5,000 acres or more).	14,338	Include in inventory. Modified. Final travel management decision was applied to area and acreage changed due to motorized camping corridors.	14,283
D3_5K2	5,166	Exclude from inventory. Once substantially noticeable range improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Area is contiguous to the administrative facilities of Langmuir Research Site. Reduced to 4,742 acres.	N/A	Include in inventory. Public comment received that area would be easy to manage as wilderness even though under 5,000 acres. Brought back into inventory with modified boundary to exclude substantially noticeable improvements. Size criteria are not met (5,000 acres or more) but manageability will be considered in evaluation.	4,742
D3_5K3	7,116	Include in inventory. Modified. Substantially noticeable range and mining improvements were excluded. Size criteria are met (5,000 acres or more).	7,060	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (5,000 acres or more).	7,315

¹⁴ The final Travel Management decision for the Magdalena District was signed on September 30, 2015. Accordingly, all of the inventoried areas on the Phase 2 maps were updated to reflect the decision routes, and the inventory roads criteria was applied. For this reason, acreages differ from Phase 2 to Phase 3 Inventory for Magdalena.

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_5K4	6,414	Exclude from inventory. Once substantially noticeable vegetation treatment, range, and mining improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 2,017 acres.	N/A	N/A	N/A
D3_5K5	6,630	Include in inventory. Modified. Substantially noticeable vegetation treatment and range improvements were excluded. Size criteria were met (5,000 acres or more).	6,131	Include in inventory. Modified. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (5,000 acres or more).	5,964
D3_5K6	18,703	Include in inventory. Modified. Substantially noticeable vegetation treatment and range improvements were excluded and divided area in multiple areas. Areas under 5,000 acres were not included in inventory. Size criteria for D3_5K6 were met (5,000 acres or more).	8,070	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are met (5,000 acres or more).	8,264
D3_5K6.b	Included in D3_5K6 Phase 1 total acreage.	Exclude from inventory. Excluded from total D3_5K6 acreage in Phase 2 due to exclusion of substantially noticeable improvements and size criteria were not met (under 5,000 acres).	N/A	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are not met (5,000 acres or more) but manageability will be considered in evaluation. Area acreage identified as separate from D3_5K6 in Phase 3.	3,800

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_5K6.d	Included in D3_5K6 Phase 1 total acreage.	Exclude from inventory. Excluded from total D3_5K6 acreage in Phase 2 due to exclusion of substantially noticeable improvements and size criteria were not met (under 5,000 acres).	N/A	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are not met (5,000 acres or more) but manageability will be considered in evaluation. Area acreage identified as separate from D3_5K6 in Phase 3.	3,545
D3_5K6.e	Included in D3_5K6 Phase 1 total acreage.	Exclude from inventory. Excluded from total D3_5K6 acreage in Phase 2 due to exclusion of substantially noticeable improvements and size criteria were not met (under 5,000 acres).	N/A	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are not met (5,000 acres or more) but manageability will be considered in evaluation. Area acreage identified as separate from D3_5K6 in Phase 3.	1,073
D3_5K7	23,159	Include in inventory. Modified. Substantially noticeable range improvements were excluded and divided area in multiple areas. Areas under 5,000 acres were not included in inventory. Size criteria for D3_5K7 were met (5,000 acres or more).	5,945	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are met (5,000 acres or more).	6,621

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_5K7.b	Included in D3_5K7 Phase 1 total acreage.	Include in inventory. Modified. Substantially noticeable range improvements were excluded. Size criteria are met (5,000 acres or more).	5, 236	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are met (5,000 acres or more).	5,787
D3_5K7.c	Included in D3_5K7 Phase 1 total acreage.	Exclude from inventory. Excluded from total D3_5K7 acreage in Phase 2 due to exclusion of substantially noticeable improvements and size criteria were not met (under 5,000 acres).	N/A	Include in inventory. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are not met (5,000 acres or more) but manageability will be considered in evaluation. Area acreage identified as separate from D3_5K7 in Phase 3.	4,527
D3_5K7.d	Included in D3_5K7 Phase 1 total acreage.	Exclude from inventory. Excluded from total D3_5K7 acreage in Phase 2 due to exclusion of substantially noticeable improvements and size criteria were not met (under 5,000 acres).	N/A	Include in inventory. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are not met (5,000 acres or more) but manageability will be considered in evaluation. Area acreage identified as separate from D3_5K7 in Phase 3.	3,154

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_5K7.e	Included in D3_5K7 Phase 1 total acreage.	Exclude from inventory. Excluded from total D3_5K7 acreage in Phase 2 due to exclusion of substantially noticeable improvements and size criteria were not met (under 5,000 acres).	N/A	Include in inventory. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are not met (5,000 acres or more) but manageability will be considered in evaluation. Area acreage identified as separate from D3_5K7 in Phase 3.	3,497
D3_5K7.f	Included in D3_5K7 Phase 1 total acreage.	Exclude from inventory. Excluded from total D3_5K7 acreage in Phase 2 due to exclusion of substantially noticeable improvements and size criteria were not met (under 5,000 acres).	N/A	Include in inventory. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are not met (5,000 acres or more) but manageability will be considered in evaluation. Area acreage identified as separate from D3_5K7 in Phase 3.	840
D3_5K8	7,551	Exclude from inventory. Once substantially noticeable vegetation treatment and range improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 3,509 acres.	N/A	N/A	N/A

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_5K9	6,743	Exclude from inventory. Once substantially noticeable vegetation treatment and range improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 4,214 acres.	N/A	N/A	N/A
D3_5K10	17,399	Include in inventory. Modified. Substantially noticeable range improvements were excluded. Size criteria are met (5,000 acres or more).	13,785	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (5,000 acres or more).	14,052
D3_5K11	42,928	Include in inventory. Modified. Substantially noticeable range and watershed improvements were excluded. Additions requested by the public were included. Size criteria are met (5,000 acres or more).	35,849	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are met (5,000 acres or more). Final travel management decision was applied to area and acreage changed due to motorized camping corridors.	36,541

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_5K12	10,607	<p>Include in inventory. Modified. Substantially noticeable vegetation treatment and range improvements were excluded. Size criteria are met (5,000 acres or more).</p> <p>Field verification needed: <u>Timber Improvements:</u> Large, high stumps from historic logging may occur in Hay Canyon, between D3_5K12 and D3_5K13. This timber sale is not in the corporate database so the extent is uncertain. Possible section 12. Should be field verified.</p>	9,867	<p>Include in inventory. Modified. Final travel management decision was applied to area and acreage changed due to motorized camping corridors.</p>	9,641
D3_5K13	8,795	<p>Include in inventory. Modified. Substantially noticeable range and mining improvements were excluded. Size criteria are met (5,000 acres or more).</p> <p>Field verification needed: <u>Timber Improvements:</u> Large, high stumps from historic logging may occur in Hay Canyon, between D3_5K12 and D3_5K13. This timber sale is not in the corporate database so the extent is uncertain. Possible section 12. Should be field verified.</p>	8,725	<p>Include in inventory. Modified. Final travel management decision was applied to area and acreage changed due to motorized camping corridors.</p>	8,522
D3_5K14	5,947	<p>Include in inventory. Modified. Substantially noticeable range improvements were excluded. Size criteria are met (5,000 acres or more).</p>	5,824	<p>Include in inventory. Modified. Final travel management decision was applied to area and acreage changed due to motorized camping corridors.</p>	5,689

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_5K15	13,266	Include in inventory. Modified. Substantially noticeable range improvements were excluded. Additions requested by the public were included. Size criteria are met (5,000 acres or more).	15,393	Include in inventory. Modified. Public comment received that substantially noticeable range improvements were present in area. Features were reviewed and determined to be substantially noticeable to areas as a whole. Substantially noticeable features were removed. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (5,000 acres or more).	15,040
D3_5K16	20,272	Include in inventory. Modified. Substantially noticeable timber harvest and range improvements were excluded. Additions requested by the public were included. Size criteria are met (5,000 acres or more).	21,681	Include in inventory. Modified. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (5,000 acres or more).	27,598
D3_5K17	7,654	Merged with D3_ADJ8.	N/A	N/A	N/A
D3_5K18	5,948	Exclude from inventory. Once substantially noticeable range improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 2,765 acres.	N/A	N/A	N/A

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_5K19	18,503	Include in inventory. Modified. Substantially noticeable range and mining improvements were excluded. Size criteria are met (5,000 acres or more).	6,941	Include in inventory. Modified. Public comment received that features determined to be substantially noticeable in Phase 2 were not excluded. This was an error of omission. Substantially noticeable features were removed. Additional public comment received about a substantially noticeable range improvement in area. Range improvement was reviewed and determined to be substantially noticeable to the area as a whole, and was removed. Final travel management decision was applied to area and acreage changed due to motorized camping corridors.	6,198
D3_5K20	5,982	Exclude from inventory. Once substantially noticeable range improvements were excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 3,732 acres.	N/A	N/A	N/A
8	N/A	N/A	N/A	Include in inventory. Public comment received that area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are not met (5,000 acres or more) but manageability will be considered in evaluation.	4,696

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_ADJ1	1,400	Include in inventory. Modified. Substantially noticeable vegetation treatment and range improvements were excluded and divided area into multiple areas. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	1,236	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	1,236
D3_ADJ1.b	Included in D3_ADJ1 Phase 1 total acreage.	Include in inventory. Modified. Originally part of D3_ADJ1, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ1. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	123	Include in inventory. Modified. Public comment that area contained substantially noticeable range improvement in area. Range improvement was reviewed and determined to be substantially noticeable to the area as a whole, and was removed. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ1 in Phase 3.	105
D3_ADJ2	42	Include in inventory with no modifications. No substantially noticeable improvements identified. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	42	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	42
D3_ADJ3	394	Include in inventory. Modified. Substantially noticeable vegetation treatment improvements were excluded and divided area into multiple areas. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	117	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	117

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_ADJ3.b	Included in D3_ADJ3 Phase 1 total acreage.	Include in inventory. Modified. Originally part of D3_ADJ3, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ3. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ3 in Phase 2.	81	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	81
D3_ADJ3.c	Included in D3_ADJ3 Phase 1 total acreage.	Include in inventory. Modified. Originally part of D3_ADJ3, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ3. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ3 in Phase 2.	57	Include in inventory. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	48
D3_ADJ3.d	Included in D3_ADJ3 Phase 1 total acreage.	Include in inventory. Modified. Originally part of D3_ADJ3, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ3. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ3 in Phase 2.	55	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	55
D3_ADJ3.f	Included in D3_ADJ3 Phase 1 total acreage.	Include in inventory. Modified. Originally part of D3_ADJ3, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ3. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ3 in Phase 2.	20	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	20

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_ADJ3.g	Included in D3_ADJ3 Phase 1 total acreage.	Include in inventory. Modified. Originally part of D3_ADJ3, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ3. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ3 in Phase 2.	13	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	13
D3_ADJ3.h	Included in D3_ADJ3 Phase 1 total acreage.	Include in inventory. Modified. Originally part of D3_ADJ3, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ3. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ3 in Phase 2.	6	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	6
D3_ADJ3.i	Included in D3_ADJ3 Phase 1 total acreage.	Include in inventory. Modified. Originally part of D3_ADJ3, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ3. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ3 in Phase 2.	5	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	5
D3_ADJ4	774	Include in inventory. Modified. Substantially noticeable range improvements were excluded and adjacent areas without improvements were added. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	1,138	Include in inventory. Modified. Public comment that area contained substantially noticeable range improvement in area. Range improvement was reviewed and determined to be substantially noticeable to the area as a whole, and was removed. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	1,125

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_ADJ5	152	Include in inventory. Modified. Substantially noticeable range improvements were excluded. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	148	Include in inventory. Modified. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	133
D3_ADJ6	114	Include in inventory with no modifications. No substantially noticeable improvements identified. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	114	Include in inventory. Modified. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	36
D3_ADJ7	9,000	Include in inventory. Modified. Substantially noticeable range improvements were excluded. Additions requested by the public were included. Size criteria are met (5,000 acres or more or (if less than 5,000 acres, contiguous to existing wilderness)).	10,093	Include in inventory. Modified. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	10,052
D3_ADJ8	84,198	Include in inventory. Modified. Substantially noticeable vegetation treatment, range, and mining improvements were excluded and divided area into multiple areas. Areas under 5,000 acres were not included in inventory. Additions requested by the public were included. Size criteria are met (5,000 acres or more or if less than 5,000 acres, contiguous to existing wilderness).	33,044	Include in inventory. Modified. Public comment received that area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	32819

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_ADJ8.b	Included in D3_ADJ8 Phase 1 total acreage	Include in inventory. Modified. Originally part of D3_ADJ8, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ8. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ8 in Phase 2.	22,480	Include in inventory. Public comment that area contained substantially noticeable range improvement in area. Range improvement was reviewed and determined to be substantially noticeable to the area as a whole, and was removed. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	22,244
D3_ADJ8.c	Included in D3_ADJ8 Phase 1 total acreage	Include in inventory. Modified. Originally part of D3_ADJ8, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ8. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ8 in Phase 2.	12,725	Include in inventory. Public comment that area contained substantially noticeable range improvement in area. Range improvement was reviewed and determined to be substantially noticeable to the area as a whole, and was removed. Additional public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	12,878

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_ADJ8.d	Included in D3_ADJ8 Phase 1 total acreage	Include in inventory. Modified. Originally part of D3_ADJ8, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ8. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ8 in Phase 2.	5,895	Include in inventory. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	5,747
D3_ADJ8.e	Included in D3_ADJ8 Phase 1 total acreage	Include in inventory. Modified. Originally part of D3_ADJ8, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ8. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ8 in Phase 2.	3,814	Include in inventory. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Public comment received that an area removed in Phase 2 did not have substantially noticeable features. Area was reviewed and determined to not contain any substantially noticeable features, and was added back into inventory. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	4,214
D3_ADJ8.r	Included in D3_ADJ8 Phase 1 total acreage	Include in inventory. Modified. Originally part of D3_ADJ8, but identified as separate area once substantially noticeable improvements were excluded from D3_ADJ8. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D3_ADJ8 in Phase 2.	181	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	181

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D3_Lang	N/A	Add to inventory. Langmuir Research site plus areas contiguous to Langmuir Research site that meet inventory criteria. Substantially range and mining improvements were excluded.	33,685	Include in inventory. Modified. Public comment that area contained substantially noticeable range improvement in area. Range improvement was reviewed and determined to be substantially noticeable to the area as a whole, and was removed. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	33,483
D3_ADJ9	N/A	Add to inventory. Public comment requested the area be added to the inventory. Inventory and size criteria are met (if less than 5,000 acres, contiguous to Bureau of Land Management, Sierra Ladrones Wilderness Study Area)	898	Include in inventory. Modified. Final travel management decision was applied to area and acreage changed due to motorized camping corridors. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	889
D3_ADJ10	N/A	Add to inventory. Public comment requested the area be added to the inventory. Inventory and size criteria are met (if less than 5,000 acres, contiguous to Bureau of Land Management, Sierra Ladrones Wilderness Study Area)	641	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	641

1 **Table 7. Mountainair Ranger District, Detailed Inventory Results**

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D4_5K1	5,052	Exclude from inventory. Powerline right-of-way bisects inventory area. Once the right-of-way was excluded, the area was less than 5,000 acres and is not of sufficient size as to make practicable its preservation and use in an unimpaired condition. Reduced to 3,282 acres.	N/A	N/A	N/A
D4_5K2	10,124	Include in inventory. Modified. Substantially noticeable timber harvest, range, and mining improvements were excluded. Size criteria are met (5,000 acres or more).	7,549	Include in inventory. No change. Size criteria are met (5,000 acres or more).	7,549
D4_ADJ1	364	Include in inventory with no modifications. No substantially noticeable improvements identified. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	364	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	364
D4_ADJ2	354	Include in inventory. Modified. Recreation improvements missed in Phase 1 inventory were excluded. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	354	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	354
D4_ADJ3	472	Include in inventory. Modified. Recreation improvements missed in Phase 1 inventory were excluded. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness)	325	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	325

Inventory ID / Location	Phase 1 Acres	Phase 2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D4_ADJ4	7,388	Include in inventory. Modified. Powerline right-of-way was identified and excluded. Area no long contiguous to existing wilderness was also excluded. For remaining area, size criteria are met (5,000 acres or more or if less than 5,000 acres, contiguous to existing wilderness).	5,734	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	5,734
D4_ADJ5	9,874	Include in inventory. Modified. Substantially noticeable range improvements were excluded. Recreation improvements missed in Phase 1 inventory were excluded. Size criteria are met (5,000 acres or more or if less than 5,000 acres, contiguous to existing wilderness).	7,121	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	7,121
D4_ADJ6	792	Include in inventory. Modified. Substantially noticeable range improvements were excluded. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	567	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	567
D4_ADJ7	358	Include in inventory. Modified. Recreation improvements missed in Phase 1 inventory were excluded. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	357	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	357
D4_ADJ8	251	Include in inventory. Modified. Substantially noticeable range improvements were excluded. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	251	Include in inventory. Modified. Public comment received that features determined to be substantially noticeable in Phase 2 were not excluded. This was an error of omission. Substantially noticeable features were removed. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	246

1 **Table 8. Sandia Ranger District, Detailed Inventory Results**

Inventory ID / Location	Phase 1 Acres	Phase2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D5_ADJ1	230	Exclude D5_ADJ1 from inventory. Substantially noticeable range, mining, and watershed improvements were excluded and divided area into two separate areas, D5_ADJ1 and D5_ADJ1.b. D5_ADJ1 was excluded in Phase 2 due to a complex of substantially noticeable improvements. D5_ADJ1.b was carried forward in inventory (see below). Southern end of inventory area is part Sandia Land Exchange and was excluded. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	N/A	N/A	N/A
D5_ADJ1.b	Included in D5_ADJ1 Phase 1 total acreage (230)	Include in inventory. Modified. Originally part of D5_ADJ1, but identified as separate area once substantially noticeable improvements were excluded from D5_ADJ1. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	49	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	49
D5_ADJ2	278	Include in inventory. Modified. A road, with an easement, missed in Phase 1 inventory was excluded. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	271	Include in inventory. Modified. Public comment that area contained substantially noticeable mining improvement in area. Mining improvement was reviewed and determined to be substantially noticeable to the area as a whole, and was removed. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	268

Inventory ID / Location	Phase 1 Acres	Phase2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D5_ADJ3	95	Include in inventory with no modifications. No substantially noticeable improvements identified. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	95	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	95
D5_ADJ4	1,693	Include in inventory. Modified. Substantially noticeable vegetation treatment improvement was excluded and divided area into multiple areas, D5_ADJ4, D5_ADJ4.b and D5_ADJ4.c. D5_ADJ4.b was excluded in Phase 2 due to a complex of substantially noticeable improvements. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	1,664	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	1,664
D5_ADJ4.c	Included in D5_ADJ4 Phase 1 total acreage	Include in inventory. Modified. Originally part of D5_ADJ4, but identified as separate area once substantially noticeable improvements were excluded from D5_ADJ4. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness). Area acreage identified as separate from D5_ADJ4 in Phase 2.	6	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	6

Inventory ID / Location	Phase 1 Acres	Phase2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D5_ADJ5	1,231	Include in inventory. Modified. Substantially noticeable vegetation treatment improvement was excluded. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	1,217	Include in inventory. Modified. Public comment that area contained substantially noticeable recreation improvement in area. Recreation improvement was reviewed and determined to be substantially noticeable to the area as a whole, and was removed. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	1,216
D5_ADJ6	727	Include in inventory. Modified. Addition made to area since no right-of-way information was found for route in northern portion of area	736	Include in inventory. Modified. Public comment that area contained substantially noticeable distribution lines and right of way in area. Improvement was reviewed and determined to be substantially noticeable to the area as a whole, and was removed. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	627
D5_ADJ7	5	Include in inventory with no modifications. No substantially noticeable improvements identified. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	5	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	5
D5_ADJ8	69	Include in inventory with no modifications. No substantially noticeable improvements identified. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	69	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	69

Inventory ID / Location	Phase 1 Acres	Phase2 Results	Phase 2 Acres	Phase 3 Results	Phase 3 Acres
D5_ADJ9	333	Include in inventory with no modifications. No substantially noticeable improvements identified. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	333	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	333
D5_ADJ10	80	Include in inventory with no modifications. No substantially noticeable improvements identified. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	80	Include in inventory. No change. Size criteria are met (if less than 5,000 acres, contiguous to existing wilderness).	80

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Appendix C. The Evaluation Process

Defining Evaluation Criteria

The Cibola National Forest Plan Revision IDT developed draft questions and measures to address each of the five wilderness characteristic criteria listed in FSH 1909.12, Chapter 70-Wilderness and released these to the public in the summer of 2015. This criteria was finalized after public comment and engagement through public meetings. These were then used to evaluate the Phase 3 Inventory areas for wilderness characteristics. The final evaluation criteria are available in Appendix D.

Between the draft and final evaluation criteria, some of the considerations were edited; the rationale for these edits are provided in the following section of this document.

The evaluation criteria form was reorganized between draft and final to provide for easier documentation during the meetings (e.g. from table format to bullet format).

Applying Evaluation Criteria

Wilderness Character- Yes, No, and Where

The FSH 1909.12, Chapter 70-Wilderness Directives allows the Responsible Official to vary the scope of evaluation based on the specific characteristics of each area or portions thereof. Pursuant to this direction, the IDT evaluated the entirety of each Phase 3 inventoried area and identified which portions of each inventoried area had wilderness character when present. During the evaluation process, the interdisciplinary teams considered the approaches of 1) identifying an overall wilderness character finding for the inventoried area as a whole or 2) identifying where within an inventoried area wilderness character was present, rather than assigning an overall wilderness character finding. The first method was applied at the first interdisciplinary meeting, at Sandia Ranger District, and following this meeting, the Steering Committee decided that the second method was a more appropriate strategy. The second method-- considering if an area has wilderness character, yes or no, and where--- was used at the remaining interdisciplinary meetings. The Steering Committee reviewed the notes and recommendations from the Sandia Ranger District evaluation meetings, and made a decision on where wilderness character was present (yes, no, and where) based on the documentation. The Evaluation Criteria Narrative Forms (Appendix D) for Sandia areas were updated to reflect this decision.

Grouped Areas

The FSH 1909.12, Chapter 70-Wilderness allows the Responsible Official to divide or consolidate lands identified in the inventory into grouped areas for the purpose of evaluation. Some of the Phase 3 Inventory areas were grouped into geographic areas for the purpose of evaluation, where such groupings were logical. With these geographic area groupings, separate areas were evaluated at once, within one Evaluation Criteria Narrative Form (Appendix D). When information provided led to one finding for all of the separate areas, that was documented, and when information was different for separate areas, requiring different findings, that was also documented.

Absence of Data

Where no information was available for a question, e.g. geospatial data, public comment, or field knowledge, that question was generally given a "High" finding, as no information was available to contradict the presence of wilderness character in that area. The one exception to this was the

evaluation of Criterion 4: Unique or Outstanding Features; the absence of data in this case was not an indicator of the presence of a unique or outstanding feature, but was instead an indicator that no outstanding features were present. Absence of information was documented in the narrative forms. For a complete listing of all geospatial data used in the evaluation process, please see Table 12: Data Protocol Used for Evaluation.

Wilderness Character Findings

The Cibola National Forest considered a numerical ranking system, in depth, for use in compiling and processing all of the individual criterion questions into an overall wilderness character finding for each inventoried area. After much discussion and deliberation, the Cibola National Forest decided that a qualitative discussion by the interdisciplinary team, considering each criterion question's findings, public comment, interdisciplinary knowledge, and professional input was a more appropriate, reasonable, and transparent method for identifying wilderness character within inventoried areas. These recommendations were then presented to the Steering Committee for a decision on wilderness character.

Criterion 1: Apparent Naturalness

1a: Composition of Plant and Animal Communities

Between draft and final evaluation criteria, the word "invasive" was replaced with "nonnative" in the first consideration, to better answer the question of apparent naturalness. The consideration of dominant vegetation types, associations, and plant and animal communities was added to also better answer the question of apparent naturalness.

The evaluation of the composition of plant and animal communities considered concentrations of nonnative species as well as the existing dominant vegetation types, associations, and plant and animal communities within an area.

1b: Apparent Naturalness and Ecological Conditions

Apparent naturalness was evaluated from the perspective of the average forest visitor combined with subject matter expertise. Departure of vegetation structure from the natural range of variability was initially considered as a possible measure. This consideration was included in the draft evaluation criteria. However, this is a measure of the relative proportions of stand structures across a landscape, and it is not appropriate to apply it at the inventoried area scale. For example, while the natural range of variability may have historically included some very dense (overstocked) stands of mid-aged trees, these areas were part of a landscape mosaic comprising a wide range of tree densities and ages. This consideration was removed from the final evaluation criteria. Each inventoried area was looked at individually in the evaluation, and departure of vegetation structure was not used as a consideration. If public comment was received that the area appeared unnatural due to overstocked conditions, it was considered, since this comment was from the average forest visitor.

Between draft and final evaluation criteria, the word "forest" was replaced with "vegetation" in the second consideration addressing the naturalness of the vegetation, to better answer the question of apparent naturalness.

Since fire is a natural part of a healthy ecosystem, the impact of fire on a landscape was only considered if the impacts from a fire were of such intensity and scale that these impacts would appear unnatural to

the average forest visitor. The apparent naturalness of any post-fire recovery (e.g. revegetation, seeding, etc.) was also considered. Trespass horses within an inventoried area were considered in terms of impacts to landscape rather than presence alone.

1c: Improvements

The extent to which improvements may cause a departure from apparent naturalness was considered in terms of concentrations and spatial distribution within the area as a whole.

Departures from apparent naturalness were considered only within the inventoried area boundaries. For example, if a fence occurred on the boundary of an area, it was not considered under the apparent naturalness criterion.

Roads, non-motorized and motorized trails, unauthorized routes, and other linear travelways existing in an inventoried area were evaluated. The presence of unauthorized roads, and the potential impact these may have to apparent naturalness, were considered when known and/or identified through public comment, interdisciplinary field knowledge, or geospatial data layers. Since National Forest System trails are allowed to exist in a designated wilderness area, the extent to which these linear features may cause a departure from apparent naturalness within an inventoried area was measured in terms of amount, concentration, and level of development.

More specifics were added to the considerations between draft and final evaluation criteria to better identify improvements' impact to apparent naturalness. For example, the appearance of mining was changed to "appearance and concentration of mining, including exploration and prospecting," to better inform the evaluation of these improvements when present. The word "concentration" replaced density in these considerations; the level of data and detail needed to run density calculations was insufficient, and concentration was considered an equal replacement.

Criterion 2: Opportunities for Solitude and/or Primitive and Unconfined Recreation

The 1909.12 Planning Directives emphasize the word "or" in this criterion. The word "or" means that an area does not have to possess outstanding opportunities for both elements. Opportunities for solitude were evaluated in an inventoried area separate from opportunities for a primitive and unconfined type of recreation, and findings for each were considered by the IDT in the overall recommendation of whether an area did or did not contain wilderness character.

2a: Solitude

Factors considered in evaluation of solitude were topography, presence of screening, distance from impacts, degree of permanent intrusions, and pervasive sights and sounds within and from outside the inventoried area. Impacts to solitude were considered in terms of degree of pervasiveness to the inventoried area, not simply the presence of features that may potentially impact solitude.

Airplane over-flight data was provided to the Cibola National Forest for the purposes of evaluation, but this information was not used due to lack of frequency of use data associated with the data set provided. Without details of frequency of use and intensity, the degree of 'pervasive' impacts to solitude from these overflights could not be evaluated. When airplane noise was noted in an area, through public comment or interdisciplinary field knowledge, it was considered in evaluation for solitude.

2b: Primitive and Unconfined Recreation

The IDT also considered the degree to which ‘outstanding’ opportunities for primitive recreation may be influenced by the dominance and popularity of wilderness-dependent activities (primitive-type recreation activities) in an area and the dominance and popularity of non-wilderness-dependent activities in an area (non-primitive-type recreation activities such as mountain biking). These considerations were added to the evaluation criteria between draft and final. The types of current, designated uses on National Forest System Trails within area boundaries were also considered. Evaluation of primitive and unconfined recreation included the consideration of controls, such as fences, and the concentration and location of such controls and how these controls may or may not limit a person’s ability to recreate in an unconfined manner.

During the wilderness evaluation process, the IDT considered varying wording for the thresholds identifying opportunities for engaging in primitive and unconfined recreation. Suggestions were made by the extended IDTs (including landscape team members) to clarify the threshold wording to reflect the way in which the question was applied (e.g. that the dominance and popularity of wilderness-dependent activities versus non-wilderness-dependent activities in an area may affect the degree of ‘outstanding’ opportunities available). Suggested wording that was considered is available in Table 9, and the final wording that was used is available in Table 10. The application of the question, however, remained the same--- the degree to which ‘outstanding’ opportunities for primitive recreation may be influenced by the dominance and popularity of wilderness-dependent activities versus non-wilderness-dependent activities in an area was considered.

Table 9. Suggested wording considered for Evaluation Thresholds, Criterion 2, Question 2b

Question 2b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor’s ability to feel a part of nature.	High – There are many opportunities for engaging in primitive recreation and few opportunities to engage in nonprimitive recreation
	Moderate – There are some opportunities for engaging in primitive recreation and some opportunities to engage in nonprimitive recreation
	Low – There are few opportunities to engage in primitive recreation and many opportunities to engage in nonprimitive recreation

Table 10. Final wording for Evaluation Thresholds, Criterion 2, Question 2b

Question 2b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor’s ability to feel a part of nature.	High – There are many opportunities for engaging in primitive recreation
	Moderate – There are some opportunities for engaging in primitive recreation
	Low – There are few opportunities to engage in primitive recreation or opportunities for primitive unconfined recreation are poor to nonexistent.

The Forest Service’s Recreation Opportunity Spectrum (ROS) provides a framework which allows administration to manage and users to enjoy a variety of recreation environments. ROS is not a land classification system; it is a management objective, a way of describing and providing a variety of recreation opportunities. The ROS Inventory Existing Condition maps have been completed for the

Cibola National Forest, and the existing condition of semi-primitive non-motorized (SPNM) and semi-primitive motorized (SPM) ROS classes were used as measures in the evaluation process, and were added between draft and final evaluation criteria. Primitive ROS classes were removed as a consideration between draft and final, because Primitive ROS only exists on the Cibola National Forest within existing designated wilderness. SPNM ROS settings are areas characterized by a predominantly natural or natural-appearing environment, low interaction between users. Primitive activities occur in this setting, and include the following: viewing scenery, hiking, walking, horseback riding, camping, hunting, nature study, mountain climbing, swimming, fishing, etc. Motorized use is generally not allowed in SPNM ROS settings. SPM ROS class areas provide the same experience and setting as SPNM, but motorized use occurs in addition to primitive-types of recreation. The ROS Inventory Existing Condition maps are a map of existing condition on the forest, and desired condition ROS maps will be subject to change based on desired recreation opportunity spectrum classes developed during the interdisciplinary process of Cibola National Forest Plan Revision. The ROS maps for Magdalena Ranger District were updated with the Travel Management decision prior to the evaluation meetings. These considerations were used as one piece of the overall evaluation discussion for this criterion, in addition to field knowledge, geospatial data, and public comment. The draft ROS maps are available in July 2016.

Criterion 3: Size

The 2012 Planning Directives identifies the evaluation of how an area of less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable. The Cibola National Forest did not develop separate considerations for this criterion, but instead assumed that the other criteria and considerations, particularly manageability, would identify whether an area under 5,000 acres was of sufficient size to make its preservation and use in an unimpaired condition practicable.

Criterion 4: Unique or Outstanding Features

This criterion is not required to be present in an area for that area to have wilderness character, but it is useful to know the degree to which an area contains unique and outstanding ecological, geological, scientific, educational, scenic, or historical features. These features, when present, were evaluated, and the IDT considered these findings in the overall recommendations to the Steering Committee as supplemental and supporting information.

4a: Rare Plant and Animal Communities

Goshawk Post-Fledgling Areas and Mexican Spotted Owl Protected Activity Centers were considered rare animal or plant communities under the Unique or Outstanding features criterion in order to be consistent with other Forest Service policy and direction.

Species of conservation concern were not considered rare animal or plant communities in the wilderness evaluation process, with the assumption that there is not sufficient current scientific information at this time to indicate if the species of conservation concern plant or animal community is rare, of high quality, uniquely diverse or provide a critical link in habitat conditions for those species.

Rare plants on the Cibola National Forest have not been extensively catalogued, so an assumption was made that the mapped population of one or more rare plants constituted a Moderate wilderness character finding, and any more documented species constituted a High wilderness character finding for the unique or outstanding features criterion.

The consideration of “average modeled species richness value from New Mexico Crucial Habitat Assessment tool” was removed between draft and final evaluation criteria, because this consideration did not address the question of whether animal and plant communities in an inventoried area were rare.

4b: Outstanding Landscape Features and the Scenery Management System

The Forest Service’s Scenery Management System (SMS) provides the framework to effectively inventory, assess, and manage scenic resources. The SMS inventory draft maps have been completed for the Cibola National Forest, and the existing condition of Scenic Attractiveness was used as measures in the evaluation process. Scenic Attractiveness is a component of the SMS inventory, and is the primary indicator of the intrinsic scenic beauty based on commonly held perceptions of preferred scenery and landscape features. The three scenic attractiveness classes are: Class A-distinctive; Class B-typical; Class C-indistinctive. To determine these classes, the landscape elements of landform, vegetation, rocks, cultural features and water features are mapped using General Terrestrial Ecosystem Survey (GTES) information for the Cibola National Forest, with District personnel input on areas of the Cibola National Forest that were not picked up at the GTES scale. The Scenic Attractiveness map is based largely on existing landscape features. These maps are only existing condition, and are subject to change based on input during the interdisciplinary process of Cibola National Forest Plan Revision. These considerations were used as one piece of the overall evaluation discussion for this criterion, in addition to field knowledge, geospatial data, and public comment. The draft SMS maps are available in July 2016.

4c: Historic and Cultural Resource Sites

Due to the sensitivity concerns about cultural resources sites and their locations, this data was not shared in the interdisciplinary meetings. Rather, the Forest Service archaeologist considered each inventoried area, calculated how much of each area had been surveyed and the significance of the sites found in that percent surveyed, and assigned a preliminary finding for this criterion for each inventoried area. The IDT reviewed the initial findings of the Forest Service archaeologist, considered public comment, and interdisciplinary field knowledge to consider whether to accept or recommend a different finding to the Steering Committee

The degree to which an inventoried area contained sites of current cultural significance (e.g. gathering sites for sacred or traditional herbs) was also considered in the evaluation of this consideration.

4d: Research Natural Areas

There are no designated research natural areas within any of the Phase 3 inventoried areas. There is only one designated research natural area on the Cibola National Forest, and it is outside of the Phase 3 Inventory area boundaries (Bernalillo Watershed Research Natural Area). The Steering Committee decided to leave this consideration in, however, to document responses to this consideration, which originates from the 1909.12 Planning Directives, Chapter 70.

4e: Water Resources

During the time between the release of the draft evaluation criteria and the decision on the final evaluation criteria by the Steering Committee, the Cibola National Forest decided to conduct a new eligible wild and scenic river assessment as part of Cibola National Forest Plan Revision. If documentation from an eligible wild and scenic river study is sufficient, the 1909.12 Planning Directives allow the Cibola National Forest to carry this previous study forward during Plan Revision and only assess changed circumstances. Documentation for the Cibola National Forest was determined to be insufficient, and the Cibola National Forest decided to re-conduct the eligibility study. For this reason,

the consideration of the presence of current eligible wild and scenic rivers under the 1985 Forest Plan was removed between draft and final evaluation criteria, as this information was being re-evaluated. Additionally, the presence of outstandingly remarkable values (scenery, geology, recreation, wildlife, cultural, etc.) is part of what makes a river an eligible wild and scenic river. Criterion 4 considers unique or outstanding features, so any outstandingly remarkable values of an eligible wild and scenic river present in an inventoried area were evaluated through Criterion 4 regardless of including the eligible wild and scenic river consideration.

Outstanding Natural Resource Waters (ONRW) was another consideration under the draft evaluation criteria. This consideration was removed because it was found that all ONRW on the Cibola National Forest exist in designated wilderness.

These two considerations were removed and replaced with “presence and extent of high quality resources or important watershed features” in the final evaluation criteria.

Criterion 5: Manageability

5a: Can the Area be managed to preserve its Wilderness Characteristics

A key aspect of considerations under manageability was whether or not any of the considerations listed in 5a would have impacts to managing the area to preserve wilderness characteristics, considering existing conditions. For example, the presence of an existing use within an inventoried area does not mean that the use is necessarily in conflict with managing for wilderness character. Rather, the type, extent, and frequency of an existing use, and whether or not this use was compatible with managing for wilderness character, was evaluated.

The shape and configuration of an inventoried area and the degree to which these elements may or may not impact the ability to manage for wilderness characteristics was addressed through other manageability considerations, such as the presence and extent of non-federal land and access in the area, management of adjacent lands, and presence and extent of ‘cherry-stemmed’ roads or other linear features within the inventoried area.

The degree to which designated or proposed critical habitat may or may not impact the ability to manage an area for wilderness character was considered under the consideration “presence and extent of any specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics.”

The word “access” was added to the “presence and extent of non-Federal land” consideration in order to account for the degree to which access to a private land inholding or access across an inventoried area, etc. may or may not impact the ability to manage and area for wilderness character.

Known projects on adjacent lands and Forest Service projects listed on the Cibola National Forest’s Schedule of Proposed Actions or currently undergoing NEPA analysis were considered in the “management activities of restrictions” consideration because these are current and reasonably foreseeable actions.

Mechanized uses was added to the “presence and extent of motorized uses” consideration between draft and final evaluation criteria, to be consistent with the prohibition of motorized and mechanized uses within designated wilderness areas, with the exception of valid existing rights.

The presence of Inventoried Roadless Areas was captured in the “other” consideration, to account for the degree to which Inventoried Roadless Areas may or may not impact the ability to manage and area for wilderness character.

Unauthorized uses were considered as supporting information and the determinations for findings on Manageability were done using a holistic approach. Impacts to the landscape from unauthorized uses were also considered in Criterion 1: Apparent Naturalness, Question 1c.

Socioeconomics and Effects

Socioeconomic concerns were determined by the Cibola National Forest to be appropriate in the analysis phase of the process, rather than the evaluation phase, when issues such as impacts, benefits, and effects could be analyzed. For example, if a current use in an inventoried area may contribute to a socio-economic reason that the area should not be managed as wilderness, this will be considered in analysis.

Data Protocol

The layers used for the evaluation were the Phase 3 Inventory areas, from the following layers:

- InventoryPhaseIII_20160308
- InventoryPhaseIII_20160107
- InventoryPhaseII

Additionally, the Cibola National Forest used any data points provided through public comment, from the following layers:

- Public Comments
- PPGIS Talking Points

Reference Data used in the process included the following:

- Watersheds 5th Code (Cibola SDE)
- Streams (Cibola SDE)
- Riparian Vegetation (Cibola SDE)
- Aerial Hazards (Cibola and Kirtland)
- Cultural Surveys (Cibola Heritage)
- NM Continental Divide Trail (KMenke, UNM)
- Slope (Cibola SDE)

Table 11: Data Protocol Used for Evaluation

1909.12 Chapter 70 71.22b – Criteria	Cibola National Forest Criteria Considerations	Data Protocol for Evaluation
Criterion 1: Apparent Naturalness		
<u>Question 1a.</u> What is the composition of plant and animal communities?	<ul style="list-style-type: none"> • How are concentrations of nonnative plants and/or animals distributed across the land? • Other (Describe the dominant vegetation types, associations, and plant and animal communities. Include any additional 	<ul style="list-style-type: none"> • Invasive Plants (Cibola SDE) • Dominance Types (Cibola Midscale) • Wildlife Features (Cibola SDE) <ul style="list-style-type: none"> ○ Mexican Spotted Own PAC ○ Northern Goshawk Post Fledgling Area

1909.12 Chapter 70 71.22b – Criteria	Cibola National Forest Criteria Considerations	Data Protocol for Evaluation
	information related to the question above)	
<p><u>Question 1b.</u> What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?</p>	<ul style="list-style-type: none"> • Vegetation restoration treatments (e.g. thinning) or timber harvest areas and distribution across the land (broadly dispersed vs. concentrated). This also includes associated railroad beds, skid trails, and logging decks of timber harvest areas • Does the vegetation appear natural (consider elements, including but not limited to vegetation species composition and structure, wildlife, soil, air, etc.)? • Other (Include any additional information related to the question above) 	<ul style="list-style-type: none"> • Forest Activities Tracking System (FACTS) • Fire History (Cibola SDE) • Insect, disease, and abiotic (IDS) forest damage (R3 SDE) • Habitat Stamp Project (HSP) Features (from D3) • Cibola Priority Landscapes (Cibola project data) <ul style="list-style-type: none"> ○ Manzano ○ La Madera ○ Sandia ○ Magdalena North San Mateo ○ Mount Taylor
<p><u>Question 1c.</u> What is the extent to which improvements included in the area represent a departure from apparent naturalness?</p>	<ul style="list-style-type: none"> • Consider the extent to which the improvements cause the appearance to depart from apparent naturalness to the area as a whole. Consider the presence and concentrations of all improvements listed below: <ul style="list-style-type: none"> ○ Appearance of airstrips, heliports, and/or landing zones. Include size of area and description of disturbance (soils, vegetation). ○ Appearance and concentration of linear travelways, including maintenance level 1 roads, system non-motorized and motorized trails, and known unauthorized routes (includes decommissioned, temporary, and user created). Consider length and spatial distribution (broadly interspersed vs. concentrated). ○ Appearance and concentration of fences and pipelines. Include miles of fencing or pipeline per square mile. ○ Appearance and concentrations of areas of mining activity, including exploration and prospecting, that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation). 	<ul style="list-style-type: none"> • Airports and Heliports <ul style="list-style-type: none"> ○ National Airports (R3 SDE) ○ National Heliports (R3 SDE) ○ Geographic Names Information System (GNIS) Airports • Mines <ul style="list-style-type: none"> ○ GNIS Mines ○ Historic Mines (Cibola Heritage) ○ Abandoned-Inactive Mines (AIMs) database ○ Active mining claims (Cibola) ○ Closed mining claims (Cibola) ○ Specialist Recommendations (Cibola Geologist) • Constructed Features <ul style="list-style-type: none"> ○ Cibola Constructed Features points (Cibola SDE) ○ Cibola Constructed Features lines (Cibola SDE) • Wildlife Improvements (from D3) <ul style="list-style-type: none"> ○ HSP Point Features ○ HSP Line Features ○ HSP Polygon Features ○ HSP Landscapes • Geographic Names Information System (GNIS) <ul style="list-style-type: none"> ○ Cibola GNIS • Travel Routes

1909.12 Chapter 70 71.22b – Criteria	Cibola National Forest Criteria Considerations	Data Protocol for Evaluation
	<ul style="list-style-type: none"> ○ Appearance of range or wildlife improvements that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation). ○ Appearance of watershed treatment areas (such as contouring, diking, channeling) that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation). ○ Appearance and concentration of other improvements (including but not limited to water tanks, aviation crash locations, wreckage sites, locations of cemeteries or gravesites, bombing or ordinance locations, and watershed analysis for proposed developments) • Other (Include any additional information related to the question above) 	<ul style="list-style-type: none"> ○ All known Road Routes (GI Product, Cibola SDE and INFRA) ○ D3 Travel Management (Cibola produced) ○ Level 1 roads and motorized trails (Cibola SDE) ○ Trails (Cibola SDE) ○ Other trails (from D5) ○ Known unauthorized routes (Cibola data) • Substantially Noticeable Features <ul style="list-style-type: none"> ○ Cibola created points (not inclusive, internal notes) ○ Cibola created lines (not inclusive, internal notes) ○ Cibola Unknown Powerlines (digitized from Google Earth or special uses maps) ○ NM Transmission Lines (EV Energy Map North America) ○ Utility Corridors (1985 Forest Plan) ○ Vertical Obstruction line (R3 SDE) ○ Additional Powerlines (1985 Forest Plan) • D3 Created Features <ul style="list-style-type: none"> ○ D3 Range Improvements (from D3) ○ D3 Fences and Pipelines (from D3) • Special Uses <ul style="list-style-type: none"> ○ Sections effected by outstanding permits (Special Uses Database (SUDS))

1909.12 Chapter 70 71.22b – Criteria	Cibola National Forest Criteria Considerations	Data Protocol for Evaluation
Criterion 2: Outstanding opportunities for solitude and/or a primitive and unconfined type of recreation		
<p><u>Question 2a.</u> Consider impacts that are pervasive and influence a visitor's opportunity for solitude within the evaluated area.</p>	<ul style="list-style-type: none"> Describe the general topography of the area in context of sight, sound, and screening. Can a traveler see or hear evidence of civilization from within the area? Is the area quiet and free from motorized noise? Proximity to area of recreation developments and high use areas, private lands and associated infrastructure, non-Forest Service roads, and/or activities that impact opportunities for solitude. Consider effects of the area's adjacent, cherry-stemmed roads. Other (Include any additional information related to the question above) 	<ul style="list-style-type: none"> D3 Travel Management Sight Sounds Screening <ul style="list-style-type: none"> Substantially Noticeable Features <ul style="list-style-type: none"> Cibola created points (not inclusive, internal notes) Cibola created lines (not inclusive, internal notes) Cibola Unknown Powerlines (digitized from Google Earth or special uses maps) NM Transmission Lines (EV Energy Map North America) Utility Corridors (1985 Forest Plan) Vertical Obstruction line (R3 SDE) Additional Powerlines (1985 Forest Plan) Aerial Hazards (Cibola, R3 SDE, and Kirtland) Travel Routes (Cibola) <ul style="list-style-type: none"> Level 1 roads, motorized trails, and known unauthorized routes Developments <ul style="list-style-type: none"> Recreation sites (Cibola) All Road Routes (GI Product, Cibola SDE and INFRA) Trails (Cibola) Specialist Recommendations (Cibola Geologist) Constructed Features (Cibola SDE)
<p><u>Question 2b.</u> Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature.</p>	<ul style="list-style-type: none"> Describe the types of primitive recreation activities in the area. Describe other types of nonprimitive recreation activities in the area. Percent of area with semi-primitive non-motorized recreation opportunity spectrum class. 	<ul style="list-style-type: none"> D3 Created Features <ul style="list-style-type: none"> D3 Range Improvements (from D3) D3 Fences and Pipelines (from D3) Cibola Constructed Features lines (Cibola SDE) Rec Activities

1909.12 Chapter 70 71.22b – Criteria	Cibola National Forest Criteria Considerations	Data Protocol for Evaluation
	<ul style="list-style-type: none"> Percent of area with a semi-primitive motorized recreation opportunity spectrum class. Other (Include any additional information related to the question above) 	<ul style="list-style-type: none"> Rec Sites Mountain Districts points (Cibola SDE) Trails (Cibola SDE) Other trails (from D5) Camping Corridors and Motorized Big Game Retrieval (Mag TM) Recreation Opportunity Spectrum (ROS) (JDunn) Specialist Recommendations (Cibola Geologist)
Criterion 3: Size-- no additional considerations were used for Criterion 3		
Criterion 4: Unique and outstanding qualities		
<u>Question 4a.</u> Does the area contain rare plant or animal communities or rare ecosystems?	<ul style="list-style-type: none"> Presence of threatened, endangered, or rare species (from Natural Heritage database and other data sets as available). Other (include any additional information related to the question above) 	<ul style="list-style-type: none"> NHNM CIS Data Cibola NF 2015 (SBeck) Wildlife Feature polygons (Cibola SDE) TESP Occurrences (National SDE)
<u>Question 4b.</u> Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?	<ul style="list-style-type: none"> Description of any unique geologic features in the area. Presence of outstanding scenic features within the area or percent of area with distinctive scenic attractiveness class. Other (include any additional information related to the question above): 	<ul style="list-style-type: none"> Cibola GNIS Scenic Attractiveness (JDunn) Specialist Recommendations (Cibola Geologist) Stream Route (Cibola SDE)
<u>Question 4c.</u> Are there historic and cultural resource sites in the area?	<ul style="list-style-type: none"> Presence of structures, dwellings, and other relics of past occupation when they are considered part of the historical and cultural landscape of the area. Also consider potential historical railroad beds/berms associated with timber harvest areas from Criterion 1, Question 1b. Other (Include any additional information related to the question above) 	<ul style="list-style-type: none"> Cibola GNIS Mines <ul style="list-style-type: none"> GNIS Mines Historic Mines (Cibola Archaeology) Traditional Cultural Properties (TCPs) <ul style="list-style-type: none"> Las Huertas TCP (Cibola Heritage) Mount Taylor TCP (Cibola Heritage)
<u>Question 4d.</u> Are there any research natural areas?	<ul style="list-style-type: none"> Percent of area that is part of a research natural area. Other (Include any additional information related to the question above) 	<ul style="list-style-type: none"> Little Water Canyon RNA (Cibola)

1909.12 Chapter 70 71.22b – Criteria	Cibola National Forest Criteria Considerations	Data Protocol for Evaluation
<u>Question 4e.</u> Are there any high quality water resources or important watershed features?	<ul style="list-style-type: none"> • Presence and extent of high quality water resources in the area. • Other (Include any additional information related to the question above, including whether the water resource meets state water quality standards) 	<ul style="list-style-type: none"> • Springs (Cibola GNIS) • Streams (Cibola SDE) • Water Bodies (Cibola SDE)
Criterion 5: Manageability		
<u>Question 5a.</u> Can the area be managed to preserve its wilderness characteristics?	<ul style="list-style-type: none"> • Presence and extent of legally established rights or uses within the area. (e.g. active mining claims, grazing allotments, easements, water rights, acequias) • Presence and extent of any specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics (including but not limited to designated or proposed critical habitat). • Presence and extent of non-Federal land and access in the area • Describe management of adjacent lands. • Describe presence and extent of cultural and traditional uses of the area (e.g. shrines, ceremonial use, etc.) • Presence and extent of wildland urban interface in the area. Include acres if possible. • Describe any other management activities or restrictions within in the area (e.g. upcoming management decisions). • Describe existence and extent of motorized and mechanized uses within the area (trails, routes, special activities). • Presence and extent of special use permits and authorizations within the area. • Presence and extent of “cherry stemmed” roads or other linear features. • Other (Include presence of Inventoried Roadless Areas and any 	<ul style="list-style-type: none"> • Legal Rights and Uses <ul style="list-style-type: none"> ○ Mines <ul style="list-style-type: none"> ▪ Abandoned-Inactive Mines (AIMs) database ▪ Active mining claims (Cibola) ▪ Closed mining claims (Cibola) ▪ Specialist Recommendations (Cibola Geologist) ○ Cibola Right of Ways (ROW) (MHart) ○ Range Management Unit (RMU) (Cibola SDE) ○ Cibola Constructed Features points (Cibola SDE) ○ Cibola Constructed Features lines (Cibola SDE) ○ Substantially Noticeable Features <ul style="list-style-type: none"> ▪ Cibola created points (not inclusive, internal notes) ▪ Cibola created lines (not inclusive, internal notes) ▪ Cibola Unknown Powerlines (digitized from Google Earth or special uses maps) ▪ NM Transmission Lines (EV Energy Map North America) ▪ Utility Corridors (1985 Forest Plan) ▪ Vertical Obstruction line (R3 SDE)

1909.12 Chapter 70 71.22b – Criteria	Cibola National Forest Criteria Considerations	Data Protocol for Evaluation
	additional information related to the question above.)	<ul style="list-style-type: none"> ▪ Additional Powerlines (1985 Forest Plan) ○ D3 Improvements <ul style="list-style-type: none"> ▪ D3 Range Allotment Updates (from D3) ▪ D3 Range Improvements (from D3) ▪ Habitat Stamp Project (HSP) Features (from D3) ○ Critical Habitat (Cibola SDE) ○ Lands <ul style="list-style-type: none"> ▪ Cibola ROWs (MHart) ▪ Land Grants (BLM) ▪ Other Agency Ownership (Cibola SDE) ▪ Abq Open Space (D5) ○ BLM Lands (BLM) <ul style="list-style-type: none"> ▪ Wilderness Study Areas ▪ NLCS Natural Conservation Areas ▪ National Conservation Lands ▪ Other Special Management Areas ○ Traditional Cultural Properties (TCPs) <ul style="list-style-type: none"> ▪ Las Huertas TCP (Cibola Heritage) ▪ Mount Taylor TCP (Cibola Heritage) ○ Wildland Urban Interface (WUI) (Cibola SDE) ○ Cibola Priority Landscapes (Cibola project data) ○ Zuni Mountain Trails Alternatives (Cibola) ○ Travel Routes <ul style="list-style-type: none"> ▪ All known Road Routes (GI Product, Cibola SDE and INFRA) ▪ D3 Travel Management (Cibola produced) ▪ Level 1 roads and motorized trails (Cibola SDE) ▪ Trails (Cibola SDE) ▪ Other trails (from D5)

1909.12 Chapter 70 71.22b – Criteria	Cibola National Forest Criteria Considerations	Data Protocol for Evaluation
		<ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ Known unauthorized routes (Cibola data) ○ Special Uses <ul style="list-style-type: none"> ▪ Sections effected by outstanding permits (Special Uses Database (SUDS)) ○ Inventoried Roadless Areas (IRAs) (Cibola SDE)

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Appendix D: Evaluation Criteria and Narrative Form

AREA ID/NAME:

Evaluation interdisciplinary team meeting date:

Interdisciplinary evaluation team:

Cibola National Forest Plan Revision Steering Committee Meeting:

Criterion 1- Apparent naturalness: The degree to which an area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities? The purpose of this question is to determine if plant and animal communities appear substantially unnatural.

Considerations for 1a:

- How are concentrations of nonnative plants and/or animals distributed across the land?
 - **Narrative:**
- Other (Describe the dominant vegetation types, associations, and plant and animal communities. Include any additional information related to the question above)
 - **Narrative:**

Question 1a Findings

Question 1b. What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?

Considerations for 1b:

- Vegetation restoration treatments (e.g. thinning) or timber harvest areas and distribution across the land (broadly dispersed vs. concentrated). This also includes associated railroad beds, skid trails, and logging decks of timber harvest areas
 - **Narrative:**
- Does the vegetation appear natural (consider elements, including but not limited to vegetation species composition and structure,¹⁵ wildlife, soil, air, etc.)?
 - **Narrative:**
- Other:
 - **Narrative:**

Question 1b Findings

Question 1c. What is the extent to which improvements¹⁶ included in the area represent a departure from apparent naturalness?

¹⁵ Species composition is the number and proportion of species present. Structure refers to the size, density, and arrangement of plants.

¹⁶ The use of the term "improvements" in this context is taken from the Forest Service Handbook, and means the evidence of past human activities in the area as a whole.

1 **Considerations for 1c:**

- 2 • Consider the extent to which the improvements cause the appearance to depart from apparent
3 naturalness to the area as a whole. Consider the presence and concentrations of all
4 improvements listed below:
- 5 ○ Appearance of airstrips, heliports, and/or landing zones. Include size of area and
6 description of disturbance (soils, vegetation).
 - 7 ○ Appearance and concentration of linear travelways, including maintenance level 1
8 roads,¹⁷ system non-motorized and motorized trails, and known unauthorized routes
9 (includes decommissioned, temporary, and user created). Consider length and spatial
10 distribution (broadly interspersed vs. concentrated).
 - 11 ○ Appearance and concentration of fences and pipelines. Include miles of fencing or
12 pipeline per square mile.
 - 13 ○ Appearance and concentrations of areas of mining activity, including exploration and
14 prospecting, that were not eliminated in the Phase 3 inventory.¹⁸ Include size of area
15 and description of disturbance (soils, vegetation).
 - 16 ○ Appearance of range or wildlife improvements that were not eliminated in the Phase 3
17 inventory. Include size of area and description of disturbance (soils, vegetation).
 - 18 ○ Appearance of watershed treatment areas (such as contouring, diking, channeling) that
19 were not eliminated in the Phase 3 inventory. Include size of area and description of
20 disturbance (soils, vegetation).
 - 21 ○ Appearance and concentration of other improvements (including but not limited to
22 water tanks, aviation crash locations, wreckage sites, locations of cemeteries or
23 gravesites, bombing or ordinance locations, and viewshed analysis for proposed
24 developments)
 - 25 ○ **Narrative:**
- 26 • Other (Include any additional information related to the question above)
- 27 ○ **Narrative:**

28 **Question 1c Findings**

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29 **Criterion 2- Outstanding opportunities for solitude or a primitive and unconfined type of**
30 **recreation: the degree to which the area has outstanding opportunities for solitude or for a**
31 **primitive and unconfined type of recreation.**

32 Note: The word “or” means that an area only has to possess one or the other. The area does not have to
33 possess outstanding opportunities for both elements, nor does it need to have outstanding
34 opportunities on every acre.

35 **Question 2a. Consider impacts that are pervasive and influence a visitor’s opportunity for solitude**
36 **within the evaluated area.**

37 Note: Factors to consider may include topography, presence of screening, distance from impacts, degree
38 of permanent intrusions, and pervasive sights and sounds from outside the area.

39 **Considerations for 2a:**

¹⁷ For a glossary of road terminology, please see the *Cibola National Forest Mountain Ranger Districts Assessment Report, Vol, II*, page 258.

¹⁸ See Appendix A for Substantially Noticeable criteria used in Phase 3 inventory, and Appendix B for results from the Phase 3 Inventory.

- Describe the general topography of the area in context of sight, sound, and screening. Can a traveler see or hear evidence of civilization from within the area? Is the area quiet and free from motorized noise?
 - **Narrative:**
- Proximity to area of recreation developments and high use areas, private lands and associated infrastructure, non- Forest Service roads, and/or activities that impact opportunities for solitude. Consider effects of the area’s adjacent, cherry-stemmed roads.¹⁹
 - **Narrative:**
- Other (Include any additional information related to the question above)
 - **Narrative:**

Question 2a Findings

--

Question 2b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor’s ability to feel a part of nature.

Note: Examples of primitive-type recreation activities include observing wildlife, hiking, backpacking, horseback riding, fishing, hunting, floating, kayaking, cross-country skiing, camping, and enjoying nature. This question also relates to miles of fence information from Criterion 1, Question 1c, due to the potential for miles of fence to restrict unconfined recreation opportunities.

Considerations for 2b:

- Describe the types of primitive recreation activities in the area.
 - **Narrative:**
- Describe other types of nonprimitive recreation activities in the area.
 - **Narrative:**
- Percent of area with semi-primitive non-motorized recreation opportunity spectrum class.²⁰
 - **Narrative:**
- Percent of area with a semi-primitive motorized recreation opportunity spectrum class.
 - **Narrative:**
- Other (Include any additional information related to the question above)
 - **Narrative:**

Question 2b Findings

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¹⁹ The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase 1 Inventory process.

²⁰ The Forest Service’s Recreation Opportunity Spectrum (ROS) provides a framework which allows administration to manage and users to enjoy a variety of recreation environments. ROS is not a land classification system; it is a management objective, a way of describing and providing a variety of recreation opportunities. The ROS Inventory Existing Condition maps have been completed for the Forest, and the existing condition of semi-primitive non-motorized (SPNM) and semi-primitive motorized (SPM) ROS classes are being used as measures. SPNM ROS settings are areas characterized by a predominantly natural or natural-appearing environment, low interaction between users. Primitive activities occur in this setting, and include the following: viewing scenery, hiking, walking, horseback riding, camping, hunting, nature study, mountain climbing, swimming, fishing, etc. Motorized use is not permitted in SPNM ROS settings. SPM ROS class areas provide the same experience and setting as SPNM, but motorized use occurs in addition to primitive-types of recreation. Primitive ROS classes only exist on the Forest in the ROS Inventory Existing Condition within existing wilderness, so are not being used as a measure. These maps are only existing condition, and are subject to change based on desired recreation opportunity spectrum classes developed during the interdisciplinary process of Forest Plan Revision. Please refer to the Recreation Opportunity Spectrum Handbook and Primer for more information: http://www.fs.fed.us/cdt/carrying_capacity/rosfieldguide/ros_primer_and_field_guide.htm

Criterion 3- Stand-alone area of less than 5,000 acres that is not adjacent to existing wilderness or administratively recommended wilderness: evaluate how an area less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.

Note: If an area on the Phase 3 Inventory maps is under 5,000 acres, it will be evaluated using the other Criteria 1, 2, 3, and 4. Therefore, there are no separate considerations for Criterion 3.

Criterion 4- Unique and outstanding qualities: the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Note: These values are not required to be present in an area for the area to be recommended for inclusion in the National Wilderness Preservation System, but their presence should be identified and evaluated where they exist.

Question 4a. Does the area contain rare plant or animal communities or rare ecosystems?

Note: Rare in this context is defined as local or regional.

Considerations for 4a:

- Presence of threatened, endangered, or rare species (from Natural Heritage database and other data sets as available).
 - **Narrative:**
- Other (include any additional information related to the question above)
 - **Narrative:**

Question 4a Findings

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Question 4b. Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?

Considerations for 4b:

- Description of any unique geologic features in the area.
 - **Narrative:**
- Presence of outstanding scenic features within the area or percent of area with distinctive scenic attractiveness class.²¹
 - **Narrative:**
- Other (include any additional information related to the question above):
 - **Narrative:**

Question 4b Findings

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Question 4c. Are there historic and cultural resource sites in the area?

²¹ The Forest Service's Scenery Management System (SMS) provides the framework to effectively inventory, assess, and manage scenic resources. Scenic Attractiveness is a component of the SMS inventory, and is the primary indicator of the intrinsic scenic beauty based on commonly held perceptions of preferred scenery and landscape features. The three scenic attractiveness classes are: Class A-distinctive; Class B-typical; Class C-indistinctive. To determine these classes, the landscape elements of landform, vegetation, rocks, cultural features and water features are mapped using General Terrestrial Ecosystem Survey (GTES) information for the Forest, with District personnel input on areas of the Forest that were not picked up at the GTES scale. The Scenic Attractiveness map is based largely on existing landscape features. Refer to the Forest Service Scenery Management Handbook for more information:
http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf

Considerations for 4c:

- Presence of structures, dwellings, and other relics of past occupation when they are considered part of the historical and cultural landscape of the area. Also consider potential historical railroad beds/berms associated with timber harvest areas from Criterion 1, Question 1b.

- **Narrative:**

- Other (Include any additional information related to the question above)

- **Narrative:**

Note: (Confidentiality requirements with respect to cultural resource sites must be respected (25 U.S.C 3056)).

Question 4c Findings

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Question 4d. Are there any research natural areas?

Considerations for 4d:

- Percent of area that is part of a research natural area.

- **Narrative:**

- Other (Include any additional information related to the question above)

- **Narrative:**

Question 4d Findings

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Question 4e. Are there any high quality water resources or important watershed features?

Considerations for 4e:

- Presence and extent of high quality water resources in the area.

- **Narrative:**

- Other (Include any additional information related to the question above, including whether the water resource meets state water quality standards)

- **Narrative:**

Question 4e Findings

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Criterion 5- Management: the degree to which the area may be managed to preserve its wilderness characteristics.

Question 5a. Can the area be managed to preserve its wilderness characteristics?

Considerations for 5a:

- Presence and extent of legally established rights or uses within the area. (e.g. active mining claims, grazing allotments, easements, water rights, acequias)

- **Narrative:**

- Presence and extent of any specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics (including but not limited to designated or proposed critical habitat).

- **Narrative:**

- Presence and extent of non-Federal land and access in the area²²

²² This consideration, in addition to "Describe management of adjacent lands" and "Presence and extent of 'cherry stemmed' roads or other linear features" informs the consideration of shape and configuration as outlined in FSH 1909.12 Chapter 70.

- 1 ○ **Narrative:**
- 2 • Describe management of adjacent lands.
- 3 ○ **Narrative:**
- 4 • Describe presence and extent of cultural and traditional uses of the area (e.g. shrines,
- 5 ceremonial use, etc.)
- 6 ○ **Narrative:**
- 7 • Presence and extent of wildland urban interface in the area. Include acres if possible.
- 8 ○ **Narrative:**
- 9 • Describe any other management activities or restrictions within in the area (e.g. upcoming
- 10 management decisions).
- 11 ○ **Narrative:**
- 12 • Describe existence and extent of motorized and mechanized uses within the area (trails, routes,
- 13 special activities).
- 14 ○ **Narrative:**
- 15 • Presence and extent of special use permits and authorizations within the area.
- 16 ○ **Narrative:**
- 17 • Presence and extent of “cherry stemmed”²³ roads or other linear features.
- 18 ○ **Narrative:**
- 19 • Other (Include presence of Inventoried Roadless Areas and any additional information related to
- 20 the question above.)
- 21 ○ **Narrative:**

22 **Question 5a Findings**

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23 **IDT Findings and Preferred Proposal Discussion (How should this area be managed? Include**

24 **any suggested alternatives), Date:**

25 Finding (does area have wilderness character, and if yes, where):

26 Preferred Proposal:

27 Alternatives:

28 **Steering Committee Decision, Date:**

<u>Finding (does area have wilderness character, and if yes, where):</u>
--

<u>Preferred Proposal:</u>

<u>Alternatives:</u>

²³ The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase I Inventory process.

1 **Wilderness Evaluation Findings and Summary Table**

Area ID:		IDT Findings	Steering Committee Decision
Criterion Question*	1a		
	1b		
	1c		
	2a		
	2b		
	3		
	4a		
	4b		
	4c		
	4d		
	4e		
	5a		
Summary		Required: Supplemental:	Required: Supplemental:
Evaluation Finding			
Preferred Proposal			
Alternatives for Area			

2 **Steering Committee Notes, Date:**

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Appendix E. Evaluation Criteria Thresholds

Wilderness Character Evaluation Threshold Definitions

These thresholds were used to determine a high, moderate, or low wilderness character finding for each Criterion question from the *Wilderness Character Evaluation Criteria Matrix*.

WILDERNESS CHARACTERISTIC	Criteria	Rating
Criterion 1: Apparent Naturalness	Question 1a. How are concentrations of non-native plants and/or animals distributed across the land?	High - Non-native species are not evident
		Moderate - Non-native species are evident in isolated spots or scattered throughout
		Low - Non-native species are common in the area.
	Question 1b. What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?	High – Vegetation appears natural.
		Moderate – Vegetation does not appear natural in isolated or scattered spots.
		Low – Vegetation does not appear natural throughout or common to the area.
	Question 1c. What is the extent to which improvements included in the area represent a departure from apparent naturalness?	High – Little or no evidence of human activity. Appearance and concentration of improvements do not detract from apparent naturalness.
		Moderate – Unnoticeable or unobjectionable human activity. Appearance and concentration of improvements detract from apparent naturalness in some areas.
		Low – Obvious evidence of human activity. Area has high level of human disturbance. Appearance and concentration of improvements detract from apparent naturalness in most areas.
Criterion 2: Solitude/Primitive and Unconfined Recreation	Question 2a. Consider impacts that are pervasive and influence a visitor's opportunity for solitude within the evaluated area.	High – Significant feeling of being alone or remote from civilization
		Moderate – Feeling of being alone is possible but signs of civilization are possible
		Low – Little opportunity of feeling alone and human activities or presence is unavoidable
	Question 2b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature.	High – There are many opportunities for engaging in primitive recreation
		Moderate – There are some opportunities for engaging in primitive recreation
		Low – There are few opportunities to engage in primitive recreation or opportunities for primitive unconfined recreation are poor to nonexistent.
Criterion 3: Stand-alone area less than 5,000 acres	Criterion 3. Stand-alone area of less than 5,000 acres that is not adjacent to existing wilderness or administratively recommended wilderness: evaluate how an area less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.	There are no separate considerations for Criterion 3; polygons under 5,000 acres are evaluated using Criteria 1, 2, 4, and 5.

WILDERNESS CHARACTERISTIC	Criteria	Rating
Criterion 4: Unique and outstanding qualities	Question 4a. Does the area contain rare plant or animal communities or rare ecosystems?	High – Area has three or more rare plant and animal communities.
		Moderate – Area has one to two rare plant and animal communities.
		Low – Area has no rare plant and animal communities.
	Question 4b. Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?	High – Area has several or many outstanding landscape features.
		Moderate – Area has some outstanding landscape features.
		Low – Area has few to no outstanding landscape features.
	Question 4c. Are there historic and cultural resource sites in the area?	High – Area has several or many historic and cultural resource sites.
		Moderate – Area has some historic and cultural resource sites.
		Low – Area has few to no historic and cultural resource sites.
	Question 4d. Are there any research natural areas?	High – Area has several research natural areas.
		Moderate – Area has at least one research natural area.
		Low – Area has no research natural areas.
	Question 4e. Are there any high quality water resources or important watershed features?	High – Area has several or many high quality water resources.
		Moderate – Area has some high quality water resources.
		Low – Area has few to no high quality water resources.
Criterion 5: Management	Question 5a. Can the area be managed to preserve its wilderness characteristics?	High – presence and extent of other uses occurs in isolated spots and makes management to preserve the area’s wilderness characteristics high throughout the area.
		Moderate – presence and extent of other uses occurs in scattered areas and makes management to preserve the area’s wilderness characteristics possible in most areas.
		Low – presence and extent of other uses occurs across most of the area and makes management to preserve the area’s wilderness characteristics low in most areas.

Appendix F. Team and Team Members

The following tables present all Cibola National Forest Service persons associated with the project. Team members may be part of several teams listed. For a complete list of landscape team members present at evaluation district interdisciplinary meetings, please see the Wilderness Evaluation Narratives, available on the Forest Plan Revision website.

Table 12. Forest Service Team Members for Phase 1 and 2 Inventory

Name	Affiliation & Title
Steering Committee for Forest Plan Revision	
Elaine Kohrman	Cibola National Forest, Forest Supervisor
Dennis Aldridge	Magdalena Ranger District, District Ranger
Karen Lessard	Mountainair Ranger District, District Ranger
Cid Morgan	Sandia Ranger District, District Ranger
Robert Heiar and Tony Pacheco	Mount Taylor Ranger District, Acting District Rangers
Cynthia Benedict	Cibola National Forest, Tribal Relations Program Manager
Ian Fox	Cibola National Forest, Timber Management Officer
Cheryl Prewitt	Cibola National Forest, Forest NEPA Coordinator
Ruth Doyle	Cibola National Forest, Recreation, Engineering, Archaeology, Lands. & Minerals Staff Officer
Inventory Team	
Champe Green	Cibola National Forest, Forest Planner
Daniel LeVrier	Cibola National Forest, Geographer (GIS, Natural Resources)
Nicole Hill	Forest Service Landscape Architect (Enterprise Program)
Ruth Doyle	Cibola National Forest, Recreation, Engineering, Archaeology, Lands. & Minerals Staff Officer
Rob Arlowe	Cibola National Forest, Resource Information Program Manager
Susan Millsap	Cibola National Forest Natural Resource Planning and Budget Staff Officer (Phase 1 Team Member)
Jessica Dunn	Cibola National Forest, Acting Recreation, Scenery, and Designated Areas Specialist (Phase 2 Team Member)
District Interdisciplinary Teams	
Anthony Martinez	Mountainair Ranger District, Fire Management Officer
Alan Warren	Mountainair Ranger District, Range Staff
Aaron Johnson	Cibola National Forest, Forester,
Tony Garcia	Sandia Ranger District, Volunteer Partnerships Coordinator
Zach Parsons	Sandia Ranger District, Acting Forest Biologist
Kerry Wood	Sandia Ranger District, Wilderness/Trails Program Manager
Emily Mertzweiller	Magdalena Ranger District, District Forester
Justin Herbert	Magdalena Ranger District, Rangeland Specialist
Manuel Martinez	Magdalena Ranger District, District Fire Management Officer
Suzanne Derosier	Magdalena Ranger District, Wildlife Biologist
Kenton Martin	Magdalena Ranger District, Rangeland Management Specialist
Herbert Ray	Magdalena Ranger District, Recreation Technician
Tina Cason	Magdalena Ranger District, Range Staff
Jeanne Dawson	Mount Taylor Ranger District, Timber Management Assistant
Arnold Wilson	Mount Taylor Ranger District, Forester
Consuelo Zamora	Mount Taylor Ranger District, Wildlife Biologist
Orlando Cortez	Mount Taylor Ranger District, Rangeland Management Specialist
Eddie Baca	Mount Taylor Ranger District, Assistant Fire Management Officer
Extended Team	
Kyung Koh	Region 3, Regional Office, National Resource Specialist
Michelle Aldridge	Region 3, Regional Office, Regional Planning Specialist
Bjorn Fredrickson	Region 3, Regional Office, former Acting Wilderness, Wild & Scenic Rivers, and Cave Program Lead
Donald Serrano	Cibola National Forest, Range Program Manager

Livia Crowley	Cibola National Forest, Hydrologist
Bev DeGruyter	Cibola National Forest, Wildlife Program Manager
Diane Tafoya	Cibola and Kaibab National Forest, Zone Geologist
Shawn Martin	Cibola National Forest, Silviculturist
Responsible Official	
Elaine Kohrman	Cibola National Forest, Forest Supervisor

1 **Table 13. Forest Service Team Members for Phase 3 Inventory and Phase 1 Evaluation**

Name	Affiliation & Title
Steering Committee for Forest Plan Revision	
Elaine Kohrman	Cibola National Forest, Forest Supervisor
Dennis Aldridge	Magdalena Ranger District, District Ranger
Suzanne DeRosier	Magdalena Ranger District, Acting District Ranger
George Long and Kevin Sanchez	Mountainair Ranger District, Acting District Rangers
Crystal Powell	Sandia Ranger District, District Ranger
Robert Heiar and Crystal Powell	Sandia Ranger District, District Rangers
Robert Heiar and Tony Pacheco	Mount Taylor Ranger District, Acting District Rangers
Cynthia Benedict	Cibola National Forest, Tribal Relations Program Manager
Ian Fox	Cibola National Forest, Timber Management Officer
Cheryl Prewitt	Cibola National Forest, Forest NEPA Coordinator
Ruth Doyle	Cibola National Forest, Recreation, Engineering, Archaeology, Lands. & Minerals Staff Officer
Inventory and Evaluation Team Interdisciplinary Team	
Champe Green	Cibola National Forest, Forest Planner
Jessica Dunn	Cibola National Forest, Recreation, Scenery, and Designated Areas Specialist
Sarah Beck	Cibola National Forest, Wildlife Specialist
Michael Carpinelli	Cibola National Forest, Vegetation Specialist
Sarah Browne	Cibola National Forest, Assistant Planner
Daniel LeVrier	Cibola National Forest, Geographer (GIS, Natural Resources)
Natalie Heberling	Cibola National Forest, Geographer (GIS, Natural Resources)
Rob Arlowe	Cibola National Forest, Resource Information Program Manager
Nicole Hill	Forest Service Landscape Architect (Enterprise Program)
Ruth Doyle	Cibola National Forest, Recreation, Engineering, Archaeology, Lands. & Minerals Staff Officer
Ian Fox	Cibola National Forest, Acting Natural Resources Officer
Extended Team	
Bjorn Fredrickson	Region 3, Regional Office, Wilderness, Wild & Scenic Rivers, and Cave Program Lead
Donald Serrano	Cibola National Forest, Range Program Manager
Livia Crowley	Cibola National Forest, Hydrologist
Zach Parsons	Cibola National Forest, Wildlife Program Manager
Diane Tafoya	Cibola and Kaibab National Forest, Zone Geologist
Shawn Martin	Cibola National Forest, Silviculturist
Robin Price	Cibola National Forest, Special Uses Program Manager
Jeremy Kulischeck	Cibola National Forest, Archaeologist
Michael Hart	Cibola National Forest, Lands Technician
Cynthia Benedict	Cibola National Forest, Tribal Relations Program Manager
Mount Taylor Landscape Team	Cooperating Agencies. Point of Contact: Larry Winn, McKinley Soil and Water Conservation District
Magdalena Landscape Team	Cooperating Agencies. Points of Contact: Mary Jo Fahl and Toby Boone, Sierra Soil and Water Conservation District; RuthAnn Harriet, Salado Soil and Water Conservation District
Mountainair Landscape Team	Cooperating Agencies. Point of Contact: Dierdre Tarr, Claunch-Pinto Soil and Water Conservation District
Sandia Landscape Team	Cooperating Agencies. Points of Contact: Brenda Smythe, Edgewood Soil and Water Conservation District; Rebecca Skartwed, San Antonio de Las Huertas Lan Grant
Responsible Official	
Elaine Kohrman	Cibola National Forest, Forest Supervisor

1 Appendix G. Meeting Schedule and Timeline

2 **Table 14. Meeting schedule and timeline for the inventory and evaluation process.**

Task	Date Completed by	Responsible
Inventory		
Inventory Team begins internal inventory of lands that may be suitable	September 2013	
Phase 1 Wilderness Inventory Collaborative Public Workshops using second draft proposed FSH directives Chapter 70	September 9-18, 2014	
*Public comment period: Comment period begins September 9, 2014, end November 21, 2014	September 9, 2014-November 21, 2014	
Process public input on initial wilderness inventory maps and develop a Phase 2 map	December 2014-June 2015	Members of Inventory Team, District interdisciplinary team, Steering Committee
Draft Definition Matrix	November 20, 2014	Nicole Hill
Developing a Strategy for Defining Substantially Noticeable Meeting	November 21, 2014	Members of Inventory Team and Extended Team
November 21 meeting notes and updated draft Definition Matrix	November 24, 2014	Nicole Hill
Finalize meeting notes and updated draft Definition Matrix for District use in reviewing comments	December 5, 2014	Nicole Hill and Champe Green
Meeting to conduct dry run using matrix and live GIS. Further refinements to draft Definition Matrix	December 17, 2014	Members of Inventory Team and Extended Team
Comments sorted by district and area and distributed to Inventory Team and District interdisciplinary teams	December 18, 2014	Rob Arlowe
Districts review comments	January 12, 2015	District interdisciplinary team
Meeting to review inventory areas with draft definition matrix for Phase 2. Mountainair and Sandia RDs	January 13-15, 2015	Members of Inventory Team and District interdisciplinary team
Meeting to review inventory areas with draft definition matrix for Phase 2. Magdalena RD	January 28-29, 2015	Members of Inventory Team and District interdisciplinary team
Final FSH directives for Chapter 70 released and effective.	January 30, 2015	
Meeting to review inventory areas with draft definition matrix for Phase 2. Mount Taylor RD.	February 4-5, 2015	Members of Inventory Team and District interdisciplinary team
Meeting to review inventory areas with draft definition matrix for Phase 2. Magdalena RD	February 25, 2015	Members of Inventory Team and District interdisciplinary team
Meeting to review inventory areas with draft definition matrix for Phase 2. Magdalena RD	March 3, 2015	Members of Inventory Team and District interdisciplinary team
Meeting to review inventory areas with draft definition matrix for Phase 2. Data released for FOIA. Mount Taylor RD	March 5-6, 2015	Members of Inventory Team and District interdisciplinary team

Task	Date Completed by	Responsible
Data preparation for Steering Committee Meeting. Data released for FOIA reviewed for other Ranger Districts	April 2015	Inventory Team
Steering Committee review of results and findings	April 29-30, 2015	Members of Inventory Team and Steering Committee
Modifications to map based on Steering Committee review	May-June 2015	Members of Inventory Team and Steering Committee
Forest Service Evaluation Team develops draft evaluation criteria	May-June 2015	Members of Evaluation Team and Steering Committee
Landscape Team review of wilderness materials, draft evaluation criteria, and Phase 2 Inventory maps	June 2015	Landscape Teams
Public meetings/collaborative workshops on Phase 2 Inventory maps and release of draft evaluation criteria for public comment	July-August 2015	Forest Service and Landscape Teams
* Public Comment period: Comment period begins July 20, 2015 and ends September 25, 2015	July 20, 2015- September 25, 2015	
Forest Service Evaluation Team plans evaluation process	September- October 2015	Forest Service evaluation team
Meeting to conduct evaluation dry run using criteria matrix and live GIS. Further refinements to draft matrix	September 22, 2015; October 29, 2015; November 9, 2015; November 16, 2015	Forest Service evaluation team, extended interdisciplinary specialists, Steering Committee
Landscape Teams and Forest Service code public comments received	October 8, 2015	Landscape Teams and Forest Service personnel
Landscape Team points of contact and Forest Service Steering Committee meet to discuss comments on inventory criteria in morning; Steering Committee makes decision on final inventory and evaluation criteria without Landscape Teams present in afternoon.	October 15, 2015	Forest Service planning team, Landscape Team Points of Contact, Steering Committee
Process public input on Phase 2 wilderness inventory maps and develop a Phase 3 map	October 2015	Forest Service evaluation team, extended interdisciplinary district specialists, Steering Committee
Meeting with Landscape Teams and Forest Service personnel to review comments on Phase 2 wilderness inventory maps and propose potential changes to Steering Committee for a Phase 3 map. Mountainair RD	October 19, 2015	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists
Meeting with Landscape Teams and Forest Service personnel to review comments on Phase 2 wilderness inventory maps and propose potential changes to Steering Committee for a Phase 3 map. Mount Taylor RD	October 20, 2015	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists

Task	Date Completed by	Responsible
Meeting with Landscape Teams and Forest Service personnel to review comments on Phase 2 wilderness inventory maps and propose potential changes to Steering Committee for a Phase 3 map. Magdalena RD	October 21, 2015; November 12-13, 2015, 2015	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists
Meeting with Landscape Teams and Forest Service personnel to review comments on Phase 2 wilderness inventory maps and propose potential changes to Steering Committee for a Phase 3 map. Sandia RD	October 22, 2015	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists
Steering Committee decision on Phase 3 Inventory maps after reviewing comments from public and recommendations from Landscape Team/Forest Service district meetings.	October 27, 2015	Steering Committee
Evaluation		
Meetings with Landscape Team, Forest Service evaluation team, and Forest Service District personnel to conduct evaluation on Phase 3 inventoried areas. Sandia and Mount Taylor RDs	November 30-December 2, 2015	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists
Meetings with Landscape Team, Forest Service evaluation team, and Forest Service District personnel to conduct evaluation on Phase 3 inventoried areas. Mountainair RD	December 10-11 ,2015	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists
Meetings with Landscape Team, Forest Service evaluation team, and Forest Service District personnel to conduct evaluation on Phase 3 inventoried areas. Mount Taylor RD	December 16-17 ,2015	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists
Meetings with Landscape Team, Forest Service evaluation team, and Forest Service District personnel to conduct evaluation on Phase 3 inventoried areas. Mountainair RD	January 6, 2016	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists
Meetings with Landscape Team, Forest Service evaluation team, and Forest Service District personnel to conduct evaluation on Phase 3 inventoried areas. Mount Taylor RD	January 11, 2016	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists
Meetings with Landscape Team, Forest Service evaluation team, and Forest Service District personnel to conduct evaluation on Phase 3 inventoried areas. Magdalena RD	January 12-14, 2016; January 29, 2016; February 1-3, 2016	Forest Service planning team, Landscape Teams, extended District interdisciplinary specialists
Steering Committee decision on Sandia, Mountainair, and Mount Taylor evaluation results based on recommendations from Landscape Team/Forest Service district meetings and review of public comment	January 20-21, 2016	Steering Committee
Steering Committee decision on Magdalena evaluation results based on recommendations from Landscape Team/Forest Service district meetings and review of public comment	February 5, 2016; February 11, 2016; February 19, 2016	Steering Committee
Production of draft evaluation maps	February-March 2016	Daniel LeVrier

Task	Date Completed by	Responsible
Cibola National Forest Plan Revision Retreat with Landscape Teams and Forest Service personnel including review of draft evaluation results	March 29-31, 2016	Forest Service specialists, Landscape Teams, extended District interdisciplinary specialists
Steering Committee decision on evaluation results based on comments from Cibola National Forest Plan Revision Retreat	May 9, 2016 and May 12, 2016	Steering Committee
Public meetings/collaborative workshops for release of Phase 3 Inventory maps, Draft Evaluation results, including maps and narratives	July 19-August 30, 2016	Forest Service and Landscape Teams